Author Index

Volume 81, July-December 1997

Abe J, 268
Abraham ST, 575
Adam LP, 904
Akhayani N, 289
Akita H, 672
Aldashev AA, 940
Allard MF, 540
Ambler SK, 86
Andreev OA, 688
Auch-Schwelk W, 804
Aw TY, 922

Baba A, 656
Balke CW, 462
Ball NA, 643
Bartsch P, 804
Bastawrous A, 86
Baynham TC, 229
Beauchamp M, 840
Becker RP, 848
Bender JR, 885
Bennett MR, 591
Benscoter HA, 575
Bérczi V, 988
Berger PJ, 438
Berk BC, 268, 311, 320, 550
Bers DM, 636
Bevan JA, 34
Beyer AK, 870
Bhatti ZA, 42
Birukov KG, 895
Birukova AA, 895
Blanchard EM, 1005
Bolli R, 42, 404, 1094
Boluyt MO, 176
Bonnefoy J-Y, 448
Bono F, 824
Borejdo J, 688
Bosch RF, 1045
Bou-Abboud E, 1045
Boyden PA, 110
Brahmajothi MV, 128
Bredenberg CE, 932
Briand J-P, 423
Bridge JHB, 1083
Brooks S, 493
Brovkovych V, 372
Brown HF, 60
Brown LF, 785
Bryant SR, 932
Buttrick PM, 1027

Cai G, 1065
Cao X, 404
Carmeliet P, 829
Casadei B, 60
Catanzaro DF, 558
Caulin-Glaser T, 885
Cavaillon J-M, 679
Cepinskas G, 618
Charlemagne D, 679
Chatterjee P, 258
Chen P-S, 753
Chen Z, 355
Cheng JJ, 1
Chiamvimonvat N, 742
Cho A, 328
Choudhri TF, 304
Christe M, 1005, 1021
Chu G, 485
Chuck ET, 470
Clowes AW, 17
Collen D, 829, 865
Collins T, 457
Combes A, 493
Condorelli G, 857
Conner DA, 1005, 1021
Connolly ES Jr, 304
Copeland NG, 870
Corda S, 679
Couper LL, 932
Cox HS, 438
Crawley J, 829
Crow MT, 176
Cui Y, 879
Curtis SW, 242

Dahl E, 423
D'Alonzo AJ, 1072
Damron DS, 812
Darbenzio RB, 1072
Daum G, 17
Dean RH, 320
Decking UKM, 154
Delalandre A, 840
Delbridge GJ, 282
Delorme B, 423
Delpón E, 1053
Demetris AJ, 627
Dempsey EC, 940
Dewhirst MW, 567
Díaz ME, 477
Dietz R, 363
Dimmeler S, 970
Dixon JE, 711
Dol F, 824
Dorn GW II, 485, 643
Doumen C, 165
Doyle DD, 86
Duff HJ, 120, 719
Dunzendorfer S, 963

Eisenhofer G, 438
Eisner DA, 477
Eldrup-Jørgensen J, 932
Enea I, 857
Epstein SE, 8
Erdös EG, 848
Esler MD, 438

Fabunmi RP, 448
Fang X, 258
Feldman AM, 493, 627
Feng J, 512
Filep JG, 840
Fishbein MC, 753
Fishman MC, 34
Fitting C, 679
Fleck E, 804
Flockerzi V, 526
Flores S, 922
Franklin M, 904
Franqueza L, 1053
Freay AD, 242
Freeman DM, 470
Frid MG, 940
Friedman E, 1065
Frye C, 493
Frye CS, 627
Fukuda K, 611, 656

Gaehtgens P, 804
Galione A, 879
Gandolfini M-P, 679
Gao E, 1065
Gao WD, 462
García-Cardeña G, 885
Garlid KD, 1072
Gaspo R, 512, 1045
Geary RL, 320
Geenen DL, 1027
Geisterfer-Lowrance A, 1005
German Z, 355
Gerritsen ME, 274
Ghaleb B, 53
Giannella E, 415
Gigante B, 857
Gilbert DJ, 870
Giles WR, 196
Goings GE, 86
Gold MR, 380, 387
Gonzales N, 651
Graf K, 804
Gräfe M, 804
Granger DN, 274, 922
Gray MO, 396
Greenberg CS, 567
Gros D, 423
Gross KW, 558
Grover GJ, 1072
Grunfeld S, 372
Guetta E, 8
Guetta V, 8
Guo Y, 42, 1094

Haendeler J, 970
Hagens G, 297
Hajjar RJ, 145
Haller H, 363
Hamada H, 812
Hanson SR, 24
Harker LA, 24
Haroon ZA, 567
Harrer JM, 485
Haudenschild CC, 289
Hautmann MB, 600
Hayashi Y, 504
Hedin U, 17
Heintze U, 363
Hempel A, 363
Henning SL, 540
Henninger DD, 274
Herbert J-M, 824, 829
Hershman KM, 533
Hintze TH, 53
Hiraoka E, 672
Hirata K, 504, 672
Hishikawa K, 797
Hofmann F, 526
Hoh BL, 304
Hohlfeld T, 765
Honbo NY, 396
Hong SJ, 812
Hori S, 611, 656
Horie M, 211
Horwitz J, 1065
Hotta H, 504
Hough D, 753
Hoylaerts M, 865
Hsieh HJ, 1
Hu H, 742
Hu ZY, 24
Huang C-H, 53
Huang PL, 34
Huang XP, 92
Hume JR, 101
Hurford WE, 34
Hüttl T, 988

Ichikawa H, 922
Ichinose F, 34
Iino S, 879
Iizuka K, 1005
Ikeda T, 753
Inoko M, 664
Ishida M, 550
Itoh H, 504
Iwanaga Y, 664
Iwasaki A, 664

Jackson EK, 533
Jadoon AK, 42, 1094
Janssens S, 865
Jarry-Guichard T, 423
Jenkins NA, 870
Jones CA, 558
Jones RC, 34
Jun SS, 355

Kadambi VJ, 485
Kaduce TL, 258
Kähler CM, 963
Kanazawa K, 504
Kandarian SC, 703
Kang JX, 145
Kano H, 585, 953
Kapadia SR, 187
Karagueuzian HS, 753
Karliner JS, 396
Kawashima S, 504, 672
Kelly AB, 24
Kennedy RH, 202
Khachigian LM, 282, 457
Kihara Y, 664
Kim SC, 304
Kim S-J, 53
Kinugawa K, 911
Klugbauer N, 526
Knisley SB, 229
Knot HJ, 996
Kodama H, 611, 656
Kohmoto O, 911
Kohno M, 585, 953
Kondo C, 719

Author Index

Volume 81, July-December 1997

Abe J, 268
Abraham ST, 575
Adam LP, 904
Akhayani N, 289
Akita H, 672
Aldashev AA, 940
Allard MF, 540
Ambler SK, 86
Andreev OA, 688
Auch-Schwelk W, 804
Aw TY, 922

Baba A, 656
Balke CW, 462
Ball NA, 643
Bartsch P, 804
Bastawrous A, 86
Baynham TC, 229
Beauchamp M, 840
Becker RP, 848
Bender JR, 885
Bennett MR, 591
Benscoter HA, 575
Bérczi V, 988
Berger PJ, 438
Berk BC, 268, 311, 320, 550
Bers DM, 636
Bevan JA, 34
Beyer AK, 870
Bhatti ZA, 42
Birukov KG, 895
Birukova AA, 895
Blanchard EM, 1005
Bolli R, 42, 404, 1094
Boluyt MO, 176
Bonnefoy J-Y, 448
Bono F, 824
Borejdo J, 688
Bosch RF, 1045
Bou-Abboud E, 1045
Boyden PA, 110
Brahmajothi MV, 128
Bredenberg CE, 932
Briand J-P, 423
Bridge JHB, 1083
Brooks S, 493
Brovkovych V, 372
Brown HF, 60
Brown LF, 785
Bryant SR, 932
Buttrick PM, 1027

Cai G, 1065
Cao X, 404
Carmeliet P, 829
Casadei B, 60
Catanzaro DF, 558
Caulin-Glaser T, 885
Cavaillon J-M, 679
Cepinskas G, 618
Charlemagne D, 679
Chatterjee P, 258
Chen P-S, 753
Chen Z, 355
Cheng JJ, 1
Chiamvimonvat N, 742
Cho A, 328
Choudhri TF, 304
Christe M, 1005, 1021
Chu G, 485
Chuck ET, 470
Clowes AW, 17
Collen D, 829, 865
Collins T, 457
Combes A, 493
Condorelli G, 857
Conner DA, 1005, 1021
Connolly ES Jr, 304
Copeland NG, 870
Corda S, 679
Couper LL, 932
Cox HS, 438
Crawley J, 829
Crow MT, 176
Cui Y, 879
Curtis SW, 242

Dahl E, 423
D'Alonzo AJ, 1072
Damron DS, 812
Darbenzio RB, 1072
Daum G, 17
Dean RH, 320
Decking UKM, 154
Delalandre A, 840
Delbridge GJ, 282
Delorme B, 423
Delpón E, 1053
Demetris AJ, 627
Dempsey EC, 940
Dewhirst MW, 567
Díaz ME, 477
Dietz R, 363
Dimmeler S, 970
Dixon JE, 711
Dol F, 824
Dorn GW II, 485, 643
Doumen C, 165
Doyle DD, 86
Duff HJ, 120, 719
Dunzendorfer S, 963

Eisenhofer G, 438
Eisner DA, 477
Eldrup-Jørgensen J, 932
Enea I, 857
Epstein SE, 8
Erdös EG, 848
Esler MD, 438

Fabunmi RP, 448
Fang X, 258
Feldman AM, 493, 627
Feng J, 512
Filep JG, 840
Fishbein MC, 753
Fishman MC, 34
Fitting C, 679
Fleck E, 804
Flockerzi V, 526
Flores S, 922
Franklin M, 904
Franqueza L, 1053
Freay AD, 242
Freeman DM, 470
Frid MG, 940
Friedman E, 1065
Frye C, 493
Frye CS, 627
Fukuda K, 611, 656

Gaehtgens P, 804
Galione A, 879
Gandolfini M-P, 679
Gao E, 1065
Gao WD, 462
García-Cardeña G, 885
Garlid KD, 1072
Gaspo R, 512, 1045
Geary RL, 320
Geenen DL, 1027
Geisterfer-Lowrance A, 1005
German Z, 355
Gerritsen ME, 274
Ghaleb B, 53
Giannella E, 415
Gigante B, 857
Gilbert DJ, 870
Giles WR, 196
Goings GE, 86
Gold MR, 380, 387
Gonzales N, 651
Graf K, 804
Gräfe M, 804
Granger DN, 274, 922
Gray MO, 396
Greenberg CS, 567
Gros D, 423
Gross KW, 558
Grover GJ, 1072
Grunfeld S, 372
Guetta E, 8
Guetta V, 8
Guo Y, 42, 1094

Haendeler J, 970
Hagens G, 297
Hajjar RJ, 145
Haller H, 363
Hamada H, 812
Hanson SR, 24
Harker LA, 24
Haroon ZA, 567
Harrer JM, 485
Haudenschild CC, 289
Hautmann MB, 600
Hayashi Y, 504
Hedin U, 17
Heintze U, 363
Hempel A, 363
Henning SL, 540
Henninger DD, 274
Herbert J-M, 824, 829
Hershman KM, 533
Hintze TH, 53
Hiraoka E, 672
Hirata K, 504, 672
Hishikawa K, 797
Hofmann F, 526
Hoh BL, 304
Hohlfeld T, 765
Honbo NY, 396
Hong SJ, 812
Hori S, 611, 656
Horie M, 211
Horwitz J, 1065
Hotta H, 504
Hough D, 753
Hoylaerts M, 865
Hsieh HJ, 1
Hu H, 742
Hu ZY, 24
Huang C-H, 53
Huang PL, 34
Huang XP, 92
Hume JR, 101
Hurford WE, 34
Hüttl T, 988

Ichikawa H, 922
Ichinose F, 34
Iino S, 879
Iizuka K, 1005
Ikeda T, 753
Inoko M, 664
Ishida M, 550
Itoh H, 504
Iwanaga Y, 664
Iwasaki A, 664

Jackson EK, 533
Jadoon AK, 42, 1094
Janssens S, 865
Jarry-Guichard T, 423
Jenkins NA, 870
Jones CA, 558
Jones RC, 34
Jun SS, 355

Kadambi VJ, 485
Kaduce TL, 258
Kähler CM, 963
Kanazawa K, 504
Kandarian SC, 703
Kang JX, 145
Kano H, 585, 953
Kapadia SR, 187
Karagueuzian HS, 753
Karliner JS, 396
Kawashima S, 504, 672
Kelly AB, 24
Kennedy RH, 202
Khachigian LM, 282, 457
Kihara Y, 664
Kim SC, 304
Kim S-J, 53
Kinugawa K, 911
Klugbauer N, 526
Knisley SB, 229
Knot HJ, 996
Kodama H, 611, 656
Kohmoto O, 911
Kohno M, 585, 953
Kondo C, 719

Koopmans D, 328
Korach KS, 242
Koretsky AP, 627
Kranias EG, 485
Kroll K, 154
Kubaszewski E, 372
Kubes P, 196
Kubota T, 627
Kudej RK, 53
Kvietys PR, 618, 922

Laham RJ, 785
Lakatta EG, 176
Lander HM, 774
Langille BL, 328
LaNoue KF, 165
Lavallée M, 977
Lee J, 187
Lee MA, 857
Lees-Miller JP, 719
Lehoux S, 895
Lei M, 60
Lemster BH, 493, 627
Levi R, 415, 774
Levitan ES, 533
Lew WYW, 1011
Lewandowski ED, 165
Li D, 533
Li G-R, 512
Li H-T, 396
Li J, 785
Li P, 533
Liau G, 289
Libby P, 448
Lijnen R, 829
Lindner V, 320, 932
Lindpaintner K, 857
Lindschau C, 363
Littlewood TD, 591
Litwin SE, 1083
Liu S, 202
Liu Y, 651
Lodge NJ, 1072
Loebe M, 804
London B, 870
Long CS, 396
Long X, 176
Longobardo M, 1053
Lopaschuk GD, 540
Ludwig A, 526
Luft FC, 363
Luo W, 485
Lupu F, 829
Lüscher TF, 797

Maasch C, 363
Mach F, 448
MacLellan WR, 137
MacRitchie AN, 355
Madsen P, 297
Maes M, 1034
Magga J, 694
Magri P, 857
Makino S, 611, 656
Malhotra A, 1027
Malinski T, 372
Manchikalapudi S, 404, 1094
Mandel WJ, 753
Mann DL, 187
Marban E, 462, 742
March KL, 904
Marcic B, 848
Mares A-M, 824
Marian AJ, 76
Marotte F, 679
Marttila M, 694
Masouyé I, 297
Mathier MA, 1021
Matsui T, 145
Matsumori A, 664
Matsushima K, 664
Maughan DW, 1005
McCune SA, 703
McKinnon D, 711
McTiernan CF, 493, 627
Mebazaa A, 679
Mehdi K, 904
Melchert RB, 202
Merval R, 895
Mesaros S, 372
Meyer J, 765
Mikami S, 504
Minami M, 585, 953
Ming Z, 977
Minshall RD, 848
Mitchell HL, 703
Mitchell L, 328
Miyashiro JK, 311, 320
Mochmann H-C, 415
Mondy JS, 320
Monos E, 988
Moons L, 829
Mora R, 289
Morales MJ, 128
Mortensen RM, 1021
Murphy C, 448
Murray HN, 1072
Murray PA, 812
Musialek P, 60

Nadler JL, 651
Naka Y, 304
Nakamura F, 848
Nakano M, 187
Nakouzi A, 1027
Nattel S, 512, 1045
Negretti N, 477
Nelson MT, 996
Newton KP, 870
Nong Z, 865
Noseworthy R, 618

O'Donnell JM, 165
Oemar BS, 797
Ogawa S, 611, 656
Okada Y, 219
Olson EN, 600
O'Neill L, 176
Ono K, 664
Oral H, 187
Owens GK, 600

Page E, 86
Pan J, 611, 656
Parent R, 977
Park S, 703
Paterson DJ, 60
Patterson C, 24
Patton S, 372
Paucek P, 1072
Paul K, 643
Payen D, 679
Pelleg A, 1065
Pelt NV, 865
Pepper MS, 297
Peters DG, 703
Peters KG, 567
Peynet J, 679
Pi YQ, 92
Ping P, 404
Pinsky DJ, 304, 372
Poppa V, 311
Porcellini A, 857
Prestigiacomo CJ, 304
Pu J, 110
Pyles JM, 904

Qiu Y, 42, 404, 1094

Rabito SF, 848
Rao GN, 24
Rappaport L, 679
Regitz-Zagrosek V, 804
Reich D, 1027, 1027
Reimer KA, 128
Reinhardt PH, 196
Reinisch N, 963
Reneman RS, 988
Rippmann V, 970
Roberts J, 1065
Roberts R, 76
Robertson GA, 870
Rokosh DG, 396
Rosenbaum DS, 470
Rosenzweig A, 145
Rothbucher D, 963
Rubanyi GM, 242
Rubattu S, 857
Rudy Y, 727
Ruef J, 24
Runge MS, 24
Ruskoaho H, 694
Russo R, 857

Sakoda T, 672
Samuel JL, 679
Sanghi V, 1027
Sano M, 611
Sarrel P, 885
Sasayama S, 211, 664
Satler CA, 870
Saurat J-H, 297
Savoia C, 857
Saward L, 249
Schaeffer P, 824
Schlieper G, 154
Schmidt U, 145
Schmitz U, 550
Schneider MD, 137
Schoen FJ, 1005
Schönbeck U, 448
Schönekess BO, 540
Schrader J, 154
Schratzberger P, 963
Schrör K, 765
Schwartz SM, 591
Schwenke DC, 338, 346
Schworer CM, 575
Scott S, 651
Seidman CE, 1005, 1021
Seidman JG, 1005, 1021
Serizawa T, 911
Sessa WC, 885
Seta Y, 76
Seyedi N, 774
Shaul PW, 355
Shaw RM, 727
Sherman TS, 355
Shibutani T, 8
Shimizu T, 911
Shioi T, 664
Shyy YJ, 1
Siegenthaler G, 297
Sigmund CD, 558
Silverman H, 176
Simons M, 785
Singer HA, 575
Sipido KR, 1034
Slawson SE, 627
Smith MA, 1072
Smolich JJ, 438
Snyder DL, 1065
Snyders DJ, 1053
Solomon RA, 304
Spector AA, 258
Sreekumar R, 92
Stenmark KR, 940
Steudel W, 34
Stevenson AS, 996
Strauss HC, 128
Sukhova GK, 448
Swartz EA, 600
Szentiványi M Jr, 988

Taffet GE, 187
Takahashi E, 268
Takahashi T, 611, 911
Takai A, 219
Takano H, 1094
Takimoto K, 533
Tamargo J, 1053
Tamkun MM, 1053
Tan F, 848
Tang X-L, 42, 404, 1094
Tedgui A, 895
ter Keurs HEDJ, 462
Terrar DA, 879
Théveniau-Ruissy M, 423
Thompson MM, 600
Tkachuk VA, 895
Tokola H, 694
Tominaga M, 219
Trafford AW, 477
Trudeau MC, 870

Uchida T, 753
Ueda M, 585
Ueyama T, 672
Upshaw-Earley J, 86

Valenzuela C, 1053
van Beek JHGM, 69
Van de Werf F, 1034
Van Kuppevelt TH, 297
VanRollins M, 258
Vatner SF, 53, 1021
Veerkamp JH, 297
Vicente J, 1053
Volk R, 785
Volpe M, 857
Vuolteenaho O, 694

Wagoner DRV, 812
Walker AM, 438
Walker JW, 92
Walsh RA, 485, 643
Wambolt RB, 540
Wang DL, 1
Wang H-S, 711
Wang H-Y, 1065
Wang L, 120, 719
Wang T, 17
Wang Y, 17
Wang Z, 512
Ward CA, 196
Washizuka T, 211

Watanabe M, 470
Watanuki M, 211
Watson CL, 380, 387
Weiland U, 970
Weintraub NL, 258
Weissberg PL, 591
Welling A, 526
Wen Y, 651
Werner S, 567
White LT, 165
Wiedermann CJ, 963
Wier WG, 462
Wilensky RL, 904
Willecke K, 423
Williams JH, 703
Win T, 774
Winfree CJ, 304
Wolf RE, 922
Wong AL, 567
Wu Y, 24
Wung BS, 1

Yamada T, 664
Yamagishi T, 742
Yamazaki J, 101
Yamazaki T, 639
Yan Y, 558
Yang Z, 797
Yao A, 911
Yarov-Yarovoy V, 1072
Yashima M, 753
Yasuda S, 1011
Yasunari K, 585, 953
Yazaki Y, 639
Ye L, 289
Yin L-Y, 24
Yokokawa K, 585, 953
Yokoyama M, 504, 672
Yoshikawa J, 585, 953
Yoshikawa T, 922
Younes A, 176
Yu Q, 76
Yu X, 165
Yue L, 512
Yuhanna IS, 355

Zahradka P, 249
Zakrzewicz A, 804
Zapol WM, 34
Zeiher AM, 970
Zhang J, 404
Zhang Q, 42, 1094
Zhao G, 76
Zheng J-S, 176
Zhou S-S, 219
Zimmer S, 526
Zimmermann PA, 996
Zucker T-P, 765
Zuurbier CJ, 69

Subject Index

Volume 81, July-December 1997

A

Acetylcholine
Attachment of Meandering Reentrant Wave Fronts to Anatomic Obstacles in the Atrium: Role of the Obstacle Size, 753
Nitric Oxide–Independent Dilation of Conductance Coronary Arteries to Acetylcholine in Conscious Dogs, 977
Pulmonary Vasoconstriction and Hypertension in Mice With Targeted Disruption of the Endothelial Nitric Oxide Synthase (NOS 3) Gene, 34

Action potential
Ionic Remodeling Underlying Action Potential Changes in a Canine Model of Atrial Fibrillation, 512

Activator protein 1/tissue plasminogen activator–responsive element
Cyclic Strain–Induced Monocyte Chemotactic Protein-1 Gene Expression in Endothelial Cells Involves Reactive Oxygen Species Activation of Activator Protein 1, 1

Acyl coenzyme A synthase
Potentiation of Endothelium-Dependent Relaxation by Epoxyeicosatrienoic Acids, 258

Adenosine
Hypoxia-Induced Inhibition of Adenosine Kinase Potentiates Cardiac Adenosine Release, 154
Ischemic Preconditioning Prevents the Impairment of Hypoxic Coronary Vasodilatation Caused by Ischemia/Reperfusion: Role of Adenosine A_1/A_3 and Bradykinin B_2 Receptor Activation, 415

Adenosine A_1 receptor
Reduced Adenosine A_1 Receptor and G_α Protein Coupling in Rat Ventricular Myocardium During Aging, 1065

Adenosine kinase
Hypoxia-Induced Inhibition of Adenosine Kinase Potentiates Cardiac Adenosine Release, 154

Adenylyl cyclase
Expression, Function, and Regulation of E-Type Prostaglandin Receptors (EP_3) in the Nonischemic and Ischemic Pig Heart, 765
Reduced Adenosine A_1 Receptor and G_α Protein Coupling in Rat Ventricular Myocardium During Aging, 1065

Adhesion
Emigrated Rat Neutrophils Adhere to Cardiac Myocytes via α_4 Integrin, 196

Adhesion molecule
Exacerbation of Cerebral Injury in Mice That Express the P-Selectin Gene: Identification of P-Selectin Blockade as a New Target for the Treatment of Stroke, 304

Adrenergic nerve ending
Bradykinin B_2-Receptor Activation Augments Norepinephrine Exocytosis From Cardiac Sympathetic Nerve Endings: Mediation by Autocrine/Paracrine Mechanisms, 774

α_1-Adrenergic receptor
Cross Talk Between Angiotensin AT_1 and α_1-Adrenergic Receptors: Angiotensin II Downregulates α_{1a}-Adrenergic Receptor Subtype mRNA and Density in Neonatal Rat Cardiac Myocytes, 396
Rapamycin Inhibits α_1-Adrenergic Receptor–Stimulated Cardiac Myocyte Hypertrophy but Not Activation of Hypertrophy-Associated Genes: Evidence for Involvement of p70 S6 Kinase, 176

β-Adrenergic receptor agonist
Lipopolysaccharide Depresses Cardiac Contractility and β-Adrenergic Contractile Response by Decreasing Myofilament Response to Ca^{2+} in Cardiac Myocytes, 1011

α-Adrenoceptor
Phenylephrine-Induced Ca^{2+} Oscillations in Canine Pulmonary Artery Smooth Muscle Cells, 812

Age
Reduced Adenosine A_1 Receptor and G_α Protein Coupling in Rat Ventricular Myocardium During Aging, 1065

Aldosterone
Role of Tissue Renin in the Regulation of Aldosterone Biosynthesis in the Adrenal Cortex of Nephrectomized Rats, 857

Alternative processing
Electrophysiological Characterization of an Alternatively Processed ERG K^+ Channel in Mouse and Human Hearts, 719

Alternative splicing
Decreased Expression of Kv4.2 and Novel Kv4.3 K^+ Channel Subunit mRNAs in Ventricles of Renovascular Hypertensive Rats, 533

Aminoguanidine
Dual Role for Nitric Oxide in the Regulation of Plasma Volume and Albumin Escape During Endotoxin Shock in Conscious Rats, 840
The Protective Effect of Late Preconditioning Against Myocardial Stunning in Conscious Rabbits Is Mediated by Nitric Oxide Synthase: Evidence That Nitric Oxide Acts Both as a Trigger and as a Mediator of the Late Phase of Ischemic Preconditioning, 1094

Angiogenesis
Induction of Vascular Endothelial Growth Factor in Balloon-Injured Baboon Arteries: A Novel Role for Reactive Oxygen Species in Atherosclerosis, 24
Macrophage-Dependent Regulation of Syndecan Gene Expression, 785
Tie2 Expression and Phosphorylation in Angiogenic and Quiescent Adult Tissues, 567

Angioplasty
Activation of MAP Kinase In Vivo Follows Balloon Overstretch Injury of Porcine Coronary and Carotid Arteries, 904

Angiotensin II
Angiotensin II Activates Phosphatidylinositol 3-Kinase in Vascular Smooth Muscle Cells, 249
Angiotensin II Stimulates Tyrosine Phosphorylation of Phospholipase C-γ–Associated Proteins: Characterization of a c-Src–Dependent 97-kD Protein in Vascular Smooth Muscle Cells, 550
Angiotensin II–Induced Leukocyte Adhesion on Human Coronary Endothelial Cells Is Mediated by E-Selectin, 804
Angiotensin II–Induced Stimulation of Smooth Muscle α-Actin Expression by Serum Response Factor and the Homeodomain Transcription Factor MHox, 600
Cross Talk Between Angiotensin AT_1 and α_1-Adrenergic Receptors: Angiotensin II Downregulates α_{1a}-Adrenergic Receptor Subtype mRNA and Density in Neonatal Rat Cardiac Myocytes, 396
Evidence That Angiotensin II and Lipoxygenase Products Activate c-Jun NH_2-Terminal Kinase, 651
Is There Major Involvement of the Renin-Angiotensin System in Cardiac Hypertrophy? 639
Left Ventricular Stretch Stimulates Angiotensin II–Mediated Phosphatidylinositol Hydrolysis and Protein Kinase C ϵ Isoform Translocation in Adult Guinea Pig Hearts, 643
Role of Angiotensin II in Activation of the JAK/STAT Pathway Induced by Acute Pressure Overload in the Rat Heart, 611

Angiotensin II type-1 receptor
Experimental Diabetes Is Associated With Functional Activation of Protein Kinase Cϵ and Phosphorylation of Troponin I in the Heart, Which Are Prevented by Angiotensin II Receptor Blockade, 1027

Angiotensin receptor
Role of Tissue Renin in the Regulation of Aldosterone Biosynthesis in the Adrenal Cortex of Nephrectomized Rats, 857
Anion channel
Phosphatase-Mediated Enhancement of Cardiac cAMP-Activated Cl^- Conductance by a Cl^- Channel Blocker, Anthracene-9-Carboxylate, 219
Antioxidant
Mechanisms of Action of Troglitazone in the Prevention of High Glucose–Induced Migration and Proliferation of Cultured Coronary Smooth Muscle Cells, 953
Antisense
Pulsatile Stretch Stimulates Superoxide Production and Activates Nuclear Factor-κB in Human Coronary Smooth Muscle, 797
Antisense oligodesoxynucleotide
High Glucose Concentrations Increase Endothelial Cell Permeability via Activation of Protein Kinase Cα, 363
α_1-Antitrypsin
Transendothelial Neutrophil Migration: Role of Neutrophil-Derived Proteases and Relationship to Transendothelial Protein Movement, 618
Aorta
Comparison of Aorta and Pulmonary Artery: I. Early Cholesterol Accumulation and Relative Susceptibility to Atheromatous Lesions, 338
Comparison of Aorta and Pulmonary Artery: II. LDL Transport and Metabolism Correlate With Susceptibility to Atherosclerosis, 346
Apoptosis
Death by Design: Programmed Cell Death in Cardiovascular Biology and Disease, 137
Effects of Changes in Blood Flow Rate on Cell Death and Cell Proliferation in Carotid Arteries of Immature Rabbits, 328
Increased Sensitivity of Human Vascular Smooth Muscle Cells From Atherosclerotic Plaques to p53-Mediated Apoptosis, 591
Arachidonic acid
Potentiation of Endothelium-Dependent Relaxation by Epoxyeicosatrienoic Acids, 258
β-Arrestin1
β-Arrestin1 Knockout Mice Appear Normal but Demonstrate Altered Cardiac Responses to β-Adrenergic Stimulation, 1021
Arterial remodeling
Effects of Changes in Blood Flow Rate on Cell Death and Cell Proliferation in Carotid Arteries of Immature Rabbits, 328
As4.1 cell
Conserved Enhancer Elements in Human and Mouse Renin Genes Have Different Transcriptional Effects in As4.1 Cells, 558
Atherosclerosis
17β-Estradiol Regulation of Human Endothelial Cell Basal Nitric Oxide Release, Independent of Cytosolic Ca^{2+} Mobilization, 885
Comparison of Aorta and Pulmonary Artery: I. Early Cholesterol Accumulation and Relative Susceptibility to Atheromatous Lesions, 338
Comparison of Aorta and Pulmonary Artery: II. LDL Transport and Metabolism Correlate With Susceptibility to Atherosclerosis, 346
Diverse Effects of Heparin on Mitogen-Activated Protein Kinase–Dependent Signal Transduction in Vascular Smooth Muscle Cells, 17
Increased Sensitivity of Human Vascular Smooth Muscle Cells From Atherosclerotic Plaques to p53-Mediated Apoptosis, 591
Induction of Vascular Endothelial Growth Factor in Balloon-Injured Baboon Arteries: A Novel Role for Reactive Oxygen Species in Atherosclerosis, 24
Mevalonate-Dependent Inhibition of Transendothelial Migration and Chemotaxis of Human Peripheral Blood Neutrophils by Pravastatin, 963
Monocytes Harboring Cytomegalovirus: Interactions With Endothelial Cells, Smooth Muscle Cells, and Oxidized Low-Density Lipoprotein: Possible Mechanisms for Activating Virus Delivered by Monocytes to Sites of Vascular Injury, 8
Regulation of Matrix Metalloproteinase Expression in Human Vascular Smooth Muscle Cells by T Lymphocytes: A Role for CD40 Signaling in Plaque Rupture? 448
Smooth Muscle Cells Isolated From Discrete Compartments of the Mature Vascular Media Exhibit Unique Phenotypes and Distinct Growth Capabilities, 940
Atherosclerosis susceptibility
Comparison of Aorta and Pulmonary Artery: I. Early Cholesterol Accumulation and Relative Susceptibility to Atheromatous Lesions, 338
ATP-sensitive K^+ channel
Cardioprotective Effect of Diazoxide and Its Interaction With Mitochondrial ATP-Sensitive K^+ Channels: Possible Mechanism of Cardioprotection, 1072
Atrial fibrillation
Tachycardia-Induced Changes in Na^+ Current in a Chronic Dog Model of Atrial Fibrillation, 1045
Atrial myocyte
Type B Atrial Natriuretic Peptide Receptor in Cardiac Myocyte Caveolae, 86
Atrial natriuretic peptide B receptor
Type B Atrial Natriuretic Peptide Receptor in Cardiac Myocyte Caveolae, 86
Atrium
Attachment of Meandering Reentrant Wave Fronts to Anatomic Obstacles in the Atrium: Role of the Obstacle Size, 753
Regional Localization of *ERG*, the Channel Protein Responsible for the Rapid Component of the Delayed Rectifier, K^+ Current in the Ferret Heart, 128
Autocrine factor
Is There Major Involvement of the Renin-Angiotensin System in Cardiac Hypertrophy? 639
Autocrine/paracrine
Bradykinin B_2-Receptor Activation Augments Norepinephrine Exocytosis From Cardiac Sympathetic Nerve Endings: Mediation by Autocrine/Paracrine Mechanisms, 774

B

Blood flow
Effects of Changes in Blood Flow Rate on Cell Death and Cell Proliferation in Carotid Arteries of Immature Rabbits, 328
Platelet-Derived Growth Factor Ligand and Receptor Expression in Response to Altered Blood Flow In Vivo, 320
Blood vessel
Endothelial Cells of the Human Microvasculature Express Epidermal Fatty Acid–Binding Protein, 297
Urokinase but Not Tissue Plasminogen Activator Mediates Arterial Neointima Formation in Mice, 829
Bradykinin
Bradykinin B_2-Receptor Activation Augments Norepinephrine Exocytosis From Cardiac Sympathetic Nerve Endings: Mediation by Autocrine/Paracrine Mechanisms, 774
Ischemic Preconditioning Prevents the Impairment of Hypoxic Coronary Vasodilatation Caused by Ischemia/Reperfusion: Role of Adenosine A_1/A_3 and Bradykinin B_2 Receptor Activation, 415
Bupivacaine
Molecular Determinants of Stereoselective Bupivacaine Block of hKv1.5 Channels, 1053

C

c-*fos* promoter/enhancer
Activated *Rho*A Stimulates c-*fos* Gene Expression in Myocardial Cells, 672
c-Jun NH_2-terminal kinase
Evidence That Angiotensin II and Lipoxygenase Products Activate c-Jun NH_2-Terminal Kinase, 651

c-Src
Angiotensin II Stimulates Tyrosine Phosphorylation of Phospholipase C-γ–Associated Proteins: Characterization of a c-Src–Dependent 97-kD Protein in Vascular Smooth Muscle Cells, 550
Ca^{2+}
A Role for Ca^{2+}/Calmodulin-Dependent Protein Kinase II in the Mitogen-Activated Protein Kinase Signaling Cascade of Cultured Rat Aortic Vascular Smooth Muscle Cells, 575
Adenoviral Gene Transfer of Phospholamban in Isolated Rat Cardiomyocytes: Rescue Effects by Concomitant Gene Transfer of Sarcoplasmic Reticulum Ca^{2+}-ATPase, 145
Enhanced Ca^{2+} Current and Decreased Ca^{2+} Efflux Restore Sarcoplasmic Reticulum Ca^{2+} Content After Depletion, 477
Enhanced Na^+-Ca^{2+} Exchange in the Infarcted Heart: Implications for Excitation-Contraction Coupling, 1083
Inhibitory Effects of Glibenclamide on Cystic Fibrosis Transmembrane Regulator, Swelling-Activated, and Ca^{2+}-Activated Cl^- Channels in Mammalian Cardiac Myocytes, 101
Lipopolysaccharide Depresses Cardiac Contractility and β-Adrenergic Contractile Response by Decreasing Myofilament Response to Ca^{2+} in Cardiac Myocytes, 1011
Phenylephrine-Induced Ca^{2+} Oscillations in Canine Pulmonary Artery Smooth Muscle Cells, 812
Ca^{2+} antagonist
Alternatively Spliced IS6 Segments of the α_{1C} Gene Determine the Tissue-Specific Dihydropyridine Sensitivity of Cardiac and Vascular Smooth Muscle L-Type Ca^{2+} Channels, 526
Ca^{2+}-ATPase
Adenoviral Gene Transfer of Phospholamban in Isolated Rat Cardiomyocytes: Rescue Effects by Concomitant Gene Transfer of Sarcoplasmic Reticulum Ca^{2+}-ATPase, 145
Monomeric Phospholamban Overexpression in Transgenic Mouse Hearts, 485
Ca^{2+} channel
Direct Inhibition of Expressed Cardiac L-Type Ca^{2+} Channels by *S*-Nitrosothiol Nitric Oxide Donors, 742
Inhibition of L-Type Ca^{2+} Channel Current in Rat Ventricular Myocytes by Terfenadine, 202
Ionic Remodeling Underlying Action Potential Changes in a Canine Model of Atrial Fibrillation, 512
Low Efficiency of Ca^{2+} Entry Through the Na^+-Ca^{2+} Exchanger as Trigger for Ca^{2+} Release From the Sarcoplasmic Reticulum: A Comparison Between L-Type Ca^{2+} Current and Reverse-Mode Na^+-Ca^{2+} Exchange, 1034
Ca^{2+}-dependent K^+ channel
Venous Myogenic Tone and Its Regulation Through K^+ Channels Depends on Chronic Intravascular Pressure, 988
Ca^{2+} spark
Ca^{2+} 'Sparks' and Waves in Intact Ventricular Muscle Resolved by Confocal Imaging, 462
Ca^{2+} transient
Enhanced Ca^{2+} Current and Decreased Ca^{2+} Efflux Restore Sarcoplasmic Reticulum Ca^{2+} Content After Depletion, 477
Monomeric Phospholamban Overexpression in Transgenic Mouse Hearts, 485
Ca^{2+} transport
Ca^{2+} Sparks: Jumping the Gap From the Cell to Cardiac Muscle, 636
Ca^{2+} wave
Ca^{2+} 'Sparks' and Waves in Intact Ventricular Muscle Resolved by Confocal Imaging, 462
Ca^{2+}/calmodulin-dependent protein kinase II
A Role for Ca^{2+}/Calmodulin-Dependent Protein Kinase II in the Mitogen-Activated Protein Kinase Signaling Cascade of Cultured Rat Aortic Vascular Smooth Muscle Cells, 575
cADP-ribose
Actions of cADP-Ribose and Its Antagonists on Contraction in Guinea Pig Isolated Ventricular Myocytes: Influence of Temperature, 879
Cardiac arrhythmia
Ionic Remodeling Underlying Action Potential Changes in a Canine Model of Atrial Fibrillation, 512
Cardiac excitation
Ionic Mechanisms of Propagation in Cardiac Tissue: Roles of the Sodium and L-type Calcium Currents During Reduced Excitability and Decreased Gap Junction Coupling, 727
Cardiac function
Left Ventricular Norepinephrine and Epinephrine Kinetics at Birth in Lambs, 438
Cardiac gene expression
Involvement of Transcriptional and Posttranscriptional Mechanisms in Cardiac Overload–Induced Increase of B-Type Natriuretic Peptide Gene Expression, 694
Cardiac hypertrophy
Leukemia Inhibitory Factor, a Potent Cardiac Hypertrophic Cytokine, Activates the JAK/STAT Pathway in Rat Cardiomyocytes, 656
Cardiac ion channels
Ionic Mechanisms of Propagation in Cardiac Tissue: Roles of the Sodium and L-type Calcium Currents During Reduced Excitability and Decreased Gap Junction Coupling, 727
Cardiac ionic current
Ionic Remodeling Underlying Action Potential Changes in a Canine Model of Atrial Fibrillation, 512
Cardiac mechanics
Ca^{2+} Sparks: Jumping the Gap From the Cell to Cardiac Muscle, 636
Cardiac muscle
Actions of cADP-Ribose and Its Antagonists on Contraction in Guinea Pig Isolated Ventricular Myocytes: Influence of Temperature, 879
Interaction of the Heavy and Light Chains of Cardiac Myosin Subfragment-1 With F-Actin, 688
Cardiac myocyte
Cross Talk Between Angiotensin AT_1 and α_1-Adrenergic Receptors: Angiotensin II Downregulates α_{1a}-Adrenergic Receptor Subtype mRNA and Density in Neonatal Rat Cardiac Myocytes, 396
Emigrated Rat Neutrophils Adhere to Cardiac Myocytes via α_4 Integrin, 196
Inhibition of L-Type Ca^{2+} Channel Current in Rat Ventricular Myocytes by Terfenadine, 202
Modulation of Na^+ Current Inactivation by Stimulation of Protein Kinase C in Cardiac Cells, 380
Phosphatase-Mediated Enhancement of Cardiac cAMP-Activated Cl^- Conductance by a Cl^- Channel Blocker, Anthracene-9-Carboxylate, 219
Transcriptional Regulation of Inducible Nitric Oxide Synthase in Cultured Neonatal Rat Cardiac Myocytes, 911
Cardiac Na^+ current
Lysophosphatidylcholine Modulates Cardiac I_{Na} via Multiple Protein Kinase Pathways, 387
Cardiac synaptosome
Bradykinin B_2-Receptor Activation Augments Norepinephrine Exocytosis From Cardiac Sympathetic Nerve Endings: Mediation by Autocrine/Paracrine Mechanisms, 774
Cardiomyocyte
Interleukin-1β Inhibits Phospholamban Gene Expression in Cultured Cardiomyocytes, 493
Low Efficiency of Ca^{2+} Entry Through the Na^+-Ca^{2+} Exchanger as Trigger for Ca^{2+} Release From the Sarcoplasmic Reticulum: A Comparison Between L-Type Ca^{2+} Current and Reverse-Mode Na^+-Ca^{2+} Exchange, 1034
Monomeric Phospholamban Overexpression in Transgenic Mouse Hearts, 485
CD40 ligand
Regulation of Matrix Metalloproteinase Expression in Human Vascular Smooth Muscle Cells by T Lymphocytes: A Role for CD40 Signaling in Plaque Rupture? 448
Cell cycle
Increased Sensitivity of Human Vascular Smooth Muscle Cells From Atherosclerotic Plaques to p53-Mediated Apoptosis, 591
Cell death
Effects of Changes in Blood Flow Rate on Cell Death and Cell Proliferation in Carotid Arteries of Immature Rabbits, 328

Cell proliferation
Effects of Changes in Blood Flow Rate on Cell Death and Cell Proliferation in Carotid Arteries of Immature Rabbits, 328
Growth Factor and Cytokine-Regulated Hyaluronan-Binding Protein TSG-6 Is Localized to the Injury-Induced Rat Neointima and Confers Enhanced Growth in Vascular Smooth Muscle Cells, 289
Cephalic vein
Venous Myogenic Tone and Its Regulation Through K^+ Channels Depends on Chronic Intravascular Pressure, 988
CGP42112
Angiotensin II Induces Apoptosis of Human Endothelial Cells: Protective Effect of Nitric Oxide, 970
Chemokine
Increased Expression of Interleukin-1β and Monocyte Chemotactic and Activating Factor/Monocyte Chemoattractant Protein-1 in the Hypertrophied and Failing Heart With Pressure Overload, 664
Chimeric channel
Alternatively Spliced IS6 Segments of the α_{1C} Gene Determine the Tissue-Specific Dihydropyridine Sensitivity of Cardiac and Vascular Smooth Muscle L-Type Ca^{2+} Channels, 526
Chloramphenicol acetyltransferase assay
Monocytes Harboring Cytomegalovirus: Interactions With Endothelial Cells, Smooth Muscle Cells, and Oxidized Low-Density Lipoprotein: Possible Mechanisms for Activating Virus Delivered by Monocytes to Sites of Vascular Injury, 8
Cholesterol
Comparison of Aorta and Pulmonary Artery: I. Early Cholesterol Accumulation and Relative Susceptibility to Atheromatous Lesions, 338
Cl^- channel
Inhibitory Effects of Glibenclamide on Cystic Fibrosis Transmembrane Regulator, Swelling-Activated, and Ca^{2+}-Activated Cl^- Channels in Mammalian Cardiac Myocytes, 101
Cl^- channel blocker
Phosphatase-Mediated Enhancement of Cardiac cAMP-Activated Cl^- Conductance by a Cl^- Channel Blocker, Anthracene-9-Carboxylate, 219
Clearance
Left Ventricular Norepinephrine and Epinephrine Kinetics at Birth in Lambs, 438
Coassembly
Two Isoforms of the Mouse *Ether-a-go-go*–Related Gene Coassemble to Form Channels With Properties Similar to the Rapidly Activating Component of the Cardiac Delayed Rectifier K^+ Current, 870
Conduction
Changing Activation Sequence in the Embryonic Chick Heart: Implications for the Development of the His-Purkinje System, 470
Conduction velocity
Tachycardia-Induced Changes in Na^+ Current in a Chronic Dog Model of Atrial Fibrillation, 1045
Congestive heart failure
Increased Expression of Interleukin-1β and Monocyte Chemotactic and Activating Factor/Monocyte Chemoattractant Protein-1 in the Hypertrophied and Failing Heart With Pressure Overload, 664
Connexin
Expression Pattern of Connexin Gene Products at the Early Developmental Stages of the Mouse Cardiovascular System, 423
Contractility
Expression of a Mutant ($Arg^{92}Gln$) Human Cardiac Troponin T, Known to Cause Hypertrophic Cardiomyopathy, Impairs Adult Cardiac Myocyte Contractility, 76
Coronary artery
Nitric Oxide–Independent Dilation of Conductance Coronary Arteries to Acetylcholine in Conscious Dogs, 977
Coronary circulation
Delayed Enhanced Nitric Oxide–Mediated Coronary Vasodilation Following Brief Ischemia and Prolonged Reperfusion in Conscious Dogs, 53
CPP32
Angiotensin II Induces Apoptosis of Human Endothelial Cells: Protective Effect of Nitric Oxide, 970
Creatine kinase
Mitochondrial Response to Heart Rate Steps in Isolated Rabbit Heart Is Slowed After Myocardial Stunning, 69
Cross-linking
Interaction of the Heavy and Light Chains of Cardiac Myosin Subfragment-1 With F-Actin, 688
Cyclic strain
Cyclic Strain–Induced Monocyte Chemotactic Protein-1 Gene Expression in Endothelial Cells Involves Reactive Oxygen Species Activation of Activator Protein 1, 1
Cysteine
Direct Inhibition of Expressed Cardiac L-Type Ca^{2+} Channels by *S*-Nitrosothiol Nitric Oxide Donors, 742
Cystic fibrosis transmembrane conductance regulator
Phosphatase-Mediated Enhancement of Cardiac cAMP-Activated Cl^- Conductance by a Cl^- Channel Blocker, Anthracene-9-Carboxylate, 219
Cystic fibrosis transmembrane regulator
Inhibitory Effects of Glibenclamide on Cystic Fibrosis Transmembrane Regulator, Swelling-Activated, and Ca^{2+}-Activated Cl^- Channels in Mammalian Cardiac Myocytes, 101
Cytochrome P-450
Nitric Oxide–Independent Dilation of Conductance Coronary Arteries to Acetylcholine in Conscious Dogs, 977
Cytokine
Increased Expression of Interleukin-1β and Monocyte Chemotactic and Activating Factor/Monocyte Chemoattractant Protein-1 in the Hypertrophied and Failing Heart With Pressure Overload, 664

D

Delayed rectifier K^+ current
Endothelin-1 Inhibits the Slow Component of Cardiac Delayed Rectifier K^+ Currents via a Pertussis Toxin–Sensitive Mechanism, 211
Dephosphorylation
Phosphatase-Mediated Enhancement of Cardiac cAMP-Activated Cl^- Conductance by a Cl^- Channel Blocker, Anthracene-9-Carboxylate, 219
Desensitization
β-Arrestin1 Knockout Mice Appear Normal but Demonstrate Altered Cardiac Responses to β-Adrenergic Stimulation, 1021
Di-4-ANEPPS
Line Stimulation Parallel to Myofibers Enhances Regional Uniformity of Transmembrane Voltage Changes in Rabbit Hearts, 229
Diabetes
Increased Myogenic Tone and Diminished Responsiveness to ATP-Sensitive K^+ Channel Openers in Cerebral Arteries From Diabetic Rats, 996
Diabetes mellitus
Experimental Diabetes Is Associated With Functional Activation of Protein Kinase Cϵ and Phosphorylation of Troponin I in the Heart, Which Are Prevented by Angiotensin II Receptor Blockade, 1027
Diacylglycerol
Positive Inotropy Mediated by Diacylglycerol in Rat Ventricular Myocytes, 92
DIDS
Unexpected and Differential Effects of Cl^- Channel Blockers on the Kv4.3 and Kv4.2 K^+ Channels: Implications for the Study of the I_{to2} Current, 711
Diethylstilbestrol
Mechanism of Vascular Smooth Muscle Relaxation by Estrogen in Depolarized Rat and Mouse Aorta: Role of Nuclear Estrogen Receptor and Ca^{2+} Uptake, 242
Dihydroxyeicosatrienoic acid
Potentiation of Endothelium-Dependent Relaxation by Epoxyeicosatrienoic Acids, 258

Drug binding site
Molecular Determinants of Stereoselective Bupivacaine Block of hKv1.5 Channels, 1053

E

E-Selectin
Angiotensin II–Induced Leukocyte Adhesion on Human Coronary Endothelial Cells Is Mediated by E-Selectin, 804
E-type prostaglandin receptor
Expression, Function, and Regulation of E-Type Prostaglandin Receptors (EP_3) in the Nonischemic and Ischemic Pig Heart, 765
Early growth response factor
FGF-1–Induced Platelet-Derived Growth Factor-A Chain Gene Expression in Endothelial Cells Involves Transcriptional Activation by Early Growth Response Factor-1, 282
Inducible Expression of Egr-1–Dependent Genes: A Paradigm of Transcriptional Activation in Vascular Endothelium, 457
Editorial
Is There Major Involvement of the Renin-Angiotensin System in Cardiac Hypertrophy? 639
Elastase
Transendothelial Neutrophil Migration: Role of Neutrophil-Derived Proteases and Relationship to Transendothelial Protein Movement, 618
Electrical stimulation
Line Stimulation Parallel to Myofibers Enhances Regional Uniformity of Transmembrane Voltage Changes in Rabbit Hearts, 229
Electrophysiology
Changing Activation Sequence in the Embryonic Chick Heart: Implications for the Development of the His-Purkinje System, 470
Enantiomer
Molecular Determinants of Stereoselective Bupivacaine Block of hKv1.5 Channels, 1053
Endothelial cell
Angiotensin II–Induced Leukocyte Adhesion on Human Coronary Endothelial Cells Is Mediated by E-Selectin, 804
Platelet-Derived Growth Factor Ligand and Receptor Expression in Response to Altered Blood Flow In Vivo, 320
Endothelial cell adhesion molecule
Molecular Mechanisms of Anoxia/Reoxygenation-Induced Neutrophil Adherence to Cultured Endothelial Cells, 922
Endothelial nitric oxide synthase
Flow-Induced Vascular Remodeling in the Rat Carotid Artery Diminishes With Age, 311
Endothelin
Endothelin-1 Inhibits the Slow Component of Cardiac Delayed Rectifier K^+ Currents via a Pertussis Toxin–Sensitive Mechanism, 211
Positive Inotropy Mediated by Diacylglycerol in Rat Ventricular Myocytes, 92
Endothelin A receptor
Endothelin-1 Inhibits the Slow Component of Cardiac Delayed Rectifier K^+ Currents via a Pertussis Toxin–Sensitive Mechanism, 211
Endothelium
Coagulation Factor Xa Induces Endothelium-Dependent Relaxations in Rat Aorta, 824
Delayed Enhanced Nitric Oxide–Mediated Coronary Vasodilation Following Brief Ischemia and Prolonged Reperfusion in Conscious Dogs, 53
Estrogen Upregulates Endothelial Nitric Oxide Synthase Gene Expression in Fetal Pulmonary Artery Endothelium, 355
Increased Myogenic Tone and Diminished Responsiveness to ATP-Sensitive K^+ Channel Openers in Cerebral Arteries From Diabetic Rats, 996
Tie2 Expression and Phosphorylation in Angiogenic and Quiescent Adult Tissues, 567
Enhancer
Conserved Enhancer Elements in Human and Mouse Renin Genes Have Different Transcriptional Effects in As4.1 Cells, 558
Epicardial border zone
Alterations of Na^+ Currents in Myocytes From Epicardial Border Zone of the Infarcted Heart: A Possible Ionic Mechanism for Reduced Excitability and Postrepolarization Refractoriness, 110
Epinephrine
Left Ventricular Norepinephrine and Epinephrine Kinetics at Birth in Lambs, 438
Epoxyeicosatrienoic acid
Potentiation of Endothelium-Dependent Relaxation by Epoxyeicosatrienoic Acids, 258
17α-Estradiol
Mechanism of Vascular Smooth Muscle Relaxation by Estrogen in Depolarized Rat and Mouse Aorta: Role of Nuclear Estrogen Receptor and Ca^{2+} Uptake, 242
Estrogen
17β-Estradiol Regulation of Human Endothelial Cell Basal Nitric Oxide Release, Independent of Cytosolic Ca^{2+} Mobilization, 885
Estrogen Upregulates Endothelial Nitric Oxide Synthase Gene Expression in Fetal Pulmonary Artery Endothelium, 355
Estrogen receptor
Estrogen Upregulates Endothelial Nitric Oxide Synthase Gene Expression in Fetal Pulmonary Artery Endothelium, 355
Estrone
Mechanism of Vascular Smooth Muscle Relaxation by Estrogen in Depolarized Rat and Mouse Aorta: Role of Nuclear Estrogen Receptor and Ca^{2+} Uptake, 242
***Ether-a-go-go*–related gene**
Electrophysiological Characterization of an Alternatively Processed ERG K^+ Channel in Mouse and Human Hearts, 719
Excitation-contraction coupling
Ca^{2+} 'Sparks' and Waves in Intact Ventricular Muscle Resolved by Confocal Imaging, 462
Ca^{2+} Sparks: Jumping the Gap From the Cell to Cardiac Muscle, 636
EXP3174
Angiotensin II Induces Apoptosis of Human Endothelial Cells: Protective Effect of Nitric Oxide, 970
Extracellular matrix
Growth Factor and Cytokine-Regulated Hyaluronan-Binding Protein TSG-6 Is Localized to the Injury-Induced Rat Neointima and Confers Enhanced Growth in Vascular Smooth Muscle Cells, 289
Macrophage-Dependent Regulation of Syndecan Gene Expression, 785
Extracellular signal–regulated kinase
A Role for Ca^{2+}/Calmodulin-Dependent Protein Kinase II in the Mitogen-Activated Protein Kinase Signaling Cascade of Cultured Rat Aortic Vascular Smooth Muscle Cells, 575
Activation of MAP Kinase In Vivo Follows Balloon Overstretch Injury of Porcine Coronary and Carotid Arteries, 904
Extracellular signal–related kinase
Increased Pressure Induces Sustained Protein Kinase C–Independent Herbimycin A–Sensitive Activation of Extracellular Signal–Related Kinase 1/2 in the Rabbit Aorta in Organ Culture, 895

F

F-Actin
Interaction of the Heavy and Light Chains of Cardiac Myosin Subfragment-1 With F-Actin, 688
Factor Xa
Coagulation Factor Xa Induces Endothelium-Dependent Relaxations in Rat Aorta, 824
Fatty acid
Endothelial Cells of the Human Microvasculature Express Epidermal Fatty Acid–Binding Protein, 297

Fetus
Left Ventricular Norepinephrine and Epinephrine Kinetics at Birth in Lambs, 438
Fibroblast growth factor
FGF-1–Induced Platelet-Derived Growth Factor-A Chain Gene Expression in Endothelial Cells Involves Transcriptional Activation by Early Growth Response Factor-1, 282
Vascular Endothelial Growth Factor Increases the Mitogenic Response to Fibroblast Growth Factor-2 in Vascular Smooth Muscle Cells In Vivo via Expression of *fms*-Like Tyrosine Kinase-1, 932
Fluorescence
Interaction of the Heavy and Light Chains of Cardiac Myosin Subfragment-1 With F-Actin, 688

G

G protein
Endothelin-1 Inhibits the Slow Component of Cardiac Delayed Rectifier K^+ Currents via a Pertussis Toxin–Sensitive Mechanism, 211
Reduced Adenosine A_1 Receptor and G_α Protein Coupling in Rat Ventricular Myocardium During Aging, 1065
G protein–coupled receptor
β-Arrestin1 Knockout Mice Appear Normal but Demonstrate Altered Cardiac Responses to β-Adrenergic Stimulation, 1021
Gap junction
Ionic Mechanisms of Propagation in Cardiac Tissue: Roles of the Sodium and L-type Calcium Currents During Reduced Excitability and Decreased Gap Junction Coupling, 727
Gene expression
Expression Pattern of Connexin Gene Products at the Early Developmental Stages of the Mouse Cardiovascular System, 423
Hemodynamic Regulation of Tumor Necrosis Factor-α Gene and Protein Expression in Adult Feline Myocardium, 187
Gene regulation
Induction of Vascular Endothelial Growth Factor in Balloon-Injured Baboon Arteries: A Novel Role for Reactive Oxygen Species in Atherosclerosis, 24
Gene transfer
Adenoviral Gene Transfer of Phospholamban in Isolated Rat Cardiomyocytes: Rescue Effects by Concomitant Gene Transfer of Sarcoplasmic Reticulum Ca^{2+}-ATPase, 145
Death by Design: Programmed Cell Death in Cardiovascular Biology and Disease, 137
Expression of a Mutant ($Arg^{92}Gln$) Human Cardiac Troponin T, Known to Cause Hypertrophic Cardiomyopathy, Impairs Adult Cardiac Myocyte Contractility, 76
Glibenclamide
Inhibitory Effects of Glibenclamide on Cystic Fibrosis Transmembrane Regulator, Swelling-Activated, and Ca^{2+}-Activated Cl^- Channels in Mammalian Cardiac Myocytes, 101
Glucose
High Glucose Concentrations Increase Endothelial Cell Permeability via Activation of Protein Kinase Cα, 363
Mechanisms of Action of Troglitazone in the Prevention of High Glucose–Induced Migration and Proliferation of Cultured Coronary Smooth Muscle Cells, 953
Glucose oxidation
Contribution of Glycogen and Exogenous Glucose to Glucose Metabolism During Ischemia in the Hypertrophied Rat Heart, 540
Glycogen
Contribution of Glycogen and Exogenous Glucose to Glucose Metabolism During Ischemia in the Hypertrophied Rat Heart, 540
Glycolysis
Contribution of Glycogen and Exogenous Glucose to Glucose Metabolism During Ischemia in the Hypertrophied Rat Heart, 540
Growth factor
Trophic Effect of Human Pericardial Fluid on Adult Cardiac Myocytes: Differential Role of Fibroblast Growth Factor-2 and Factors Related to Ventricular Hypertrophy, 679
Guanylyl cyclase
Type B Atrial Natriuretic Peptide Receptor in Cardiac Myocyte Caveolae, 86

H

Haploinsufficiency
Targeted Ablation of the Murine α-Tropomyosin Gene, 1005
Heart
Ca^{2+} 'Sparks' and Waves in Intact Ventricular Muscle Resolved by Confocal Imaging, 462
Cardioprotective Effect of Diazoxide and Its Interaction With Mitochondrial ATP-Sensitive K^+ Channels: Possible Mechanism of Cardioprotection, 1072
Endothelial Cells of the Human Microvasculature Express Epidermal Fatty Acid–Binding Protein, 297
Expression Pattern of Connexin Gene Products at the Early Developmental Stages of the Mouse Cardiovascular System, 423
Trophic Effect of Human Pericardial Fluid on Adult Cardiac Myocytes: Differential Role of Fibroblast Growth Factor-2 and Factors Related to Ventricular Hypertrophy, 679
Type B Atrial Natriuretic Peptide Receptor in Cardiac Myocyte Caveolae, 86
Heart development
Changing Activation Sequence in the Embryonic Chick Heart: Implications for the Development of the His-Purkinje System, 470
Heart failure
Death by Design: Programmed Cell Death in Cardiovascular Biology and Disease, 137
Dilated Cardiomyopathy in Transgenic Mice With Cardiac-Specific Overexpression of Tumor Necrosis Factor-α, 627
Enhanced Na^+-Ca^{2+} Exchange in the Infarcted Heart: Implications for Excitation-Contraction Coupling, 1083
Skeletal Muscle Sarcoplasmic Reticulum Ca^{2+}-ATPase Gene Expression in Congestive Heart Failure, 703
Heart muscle
Alternatively Spliced IS6 Segments of the α_{1C} Gene Determine the Tissue-Specific Dihydropyridine Sensitivity of Cardiac and Vascular Smooth Muscle L-Type Ca^{2+} Channels, 526
Heart rate
Nitric Oxide Can Increase Heart Rate by Stimulating the Hyperpolarization-Activated Inward Current, I_f, 60
Heparan sulfate
Macrophage-Dependent Regulation of Syndecan Gene Expression, 785
Heparin
Diverse Effects of Heparin on Mitogen-Activated Protein Kinase–Dependent Signal Transduction in Vascular Smooth Muscle Cells, 17
HERG
Two Isoforms of the Mouse *Ether-a-go-go*–Related Gene Coassemble to Form Channels With Properties Similar to the Rapidly Activating Component of the Cardiac Delayed Rectifier K^+ Current, 870
12-HETE
Evidence That Angiotensin II and Lipoxygenase Products Activate c-Jun NH_2-Terminal Kinase, 651
His-Purkinje system
Changing Activation Sequence in the Embryonic Chick Heart: Implications for the Development of the His-Purkinje System, 470
Human
Venous Myogenic Tone and Its Regulation Through K^+ Channels Depends on Chronic Intravascular Pressure, 988
Human cardiomyopathy
Trophic Effect of Human Pericardial Fluid on Adult Cardiac Myocytes: Differential Role of Fibroblast Growth Factor-2 and Factors Related to Ventricular Hypertrophy, 679

Human coronary artery
Effect of Natriuretic Peptide Family on the Oxidized LDL–Induced Migration of Human Coronary Artery Smooth Muscle Cells, 585
Hyaluronan
Growth Factor and Cytokine-Regulated Hyaluronan-Binding Protein TSG-6 Is Localized to the Injury-Induced Rat Neointima and Confers Enhanced Growth in Vascular Smooth Muscle Cells, 289
3-Hydroxy-3-methylglutaryl coenzyme A reductase inhibitor
Mevalonate-Dependent Inhibition of Transendothelial Migration and Chemotaxis of Human Peripheral Blood Neutrophils by Pravastatin, 963
^{31}P nuclear magnetic resonance spectroscopy
Hypoxia-Induced Inhibition of Adenosine Kinase Potentiates Cardiac Adenosine Release, 154
Hypercholesterolemia
Low-Density Lipoprotein Receptor Knockout Mice Exhibit Exaggerated Microvascular Responses to Inflammatory Stimuli, 274
Hyperglycemia
High Glucose Concentrations Increase Endothelial Cell Permeability via Activation of Protein Kinase Cα, 363
Hyperpolarization-activated inward current
Nitric Oxide Can Increase Heart Rate by Stimulating the Hyperpolarization-Activated Inward Current, I_f, 60
Hypertension
Angiotensin II Stimulates p90^{rsk} in Vascular Smooth Muscle Cells: A Potential Na^+-H^+ Exchanger Kinase, 268
Increased Expression of Interleukin-1β and Monocyte Chemotactic and Activating Factor/Monocyte Chemoattractant Protein-1 in the Hypertrophied and Failing Heart With Pressure Overload, 664
Role of Tissue Renin in the Regulation of Aldosterone Biosynthesis in the Adrenal Cortex of Nephrectomized Rats, 857
Hypertrophic cardiomyopathy
Expression of a Mutant (Arg^{92}Gln) Human Cardiac Troponin T, Known to Cause Hypertrophic Cardiomyopathy, Impairs Adult Cardiac Myocyte Contractility, 76
Hypertrophy
Contribution of Glycogen and Exogenous Glucose to Glucose Metabolism During Ischemia in the Hypertrophied Rat Heart, 540
Hypoxia
Hypoxia-Induced Inhibition of Adenosine Kinase Potentiates Cardiac Adenosine Release, 154
Mitochondrial Response to Heart Rate Steps in Isolated Rabbit Heart Is Slowed After Myocardial Stunning, 69
Smooth Muscle Cells Isolated From Discrete Compartments of the Mature Vascular Media Exhibit Unique Phenotypes and Distinct Growth Capabilities, 940
Hypoxic coronary vasodilation
Ischemic Preconditioning Prevents the Impairment of Hypoxic Coronary Vasodilatation Caused by Ischemia/Reperfusion: Role of Adenosine A_1/A_3 and Bradykinin B_2 Receptor Activation, 415

I

Immediate-early gene
Cross Talk Between Angiotensin AT_1 and α_1-Adrenergic Receptors: Angiotensin II Downregulates α_{1a}-Adrenergic Receptor Subtype mRNA and Density in Neonatal Rat Cardiac Myocytes, 396
Immediate-early protein
Monocytes Harboring Cytomegalovirus: Interactions With Endothelial Cells, Smooth Muscle Cells, and Oxidized Low-Density Lipoprotein: Possible Mechanisms for Activating Virus Delivered by Monocytes to Sites of Vascular Injury, 8
Immunodepletion
Angiotensin II Stimulates p90^{rsk} in Vascular Smooth Muscle Cells: A Potential Na^+-H^+ Exchanger Kinase, 268
Immunofluorescent microscopy
Angiotensin II Activates Phosphatidylinositol 3-Kinase in Vascular Smooth Muscle Cells, 249
Immunolocalization
Regional Localization of *ERG*, the Channel Protein Responsible for the Rapid Component of the Delayed Rectifier, K^+ Current in the Ferret Heart, 128
Immunosuppressant drug
Rapamycin Inhibits α_1-Adrenergic Receptor–Stimulated Cardiac Myocyte Hypertrophy but Not Activation of Hypertrophy-Associated Genes: Evidence for Involvement of p70 S6 Kinase, 176
In situ hybridization
Regional Localization of *ERG*, the Channel Protein Responsible for the Rapid Component of the Delayed Rectifier, K^+ Current in the Ferret Heart, 128
Inducible nitric oxide synthase
Transcriptional Regulation of Inducible Nitric Oxide Synthase in Cultured Neonatal Rat Cardiac Myocytes, 911
Inflammation
Emigrated Rat Neutrophils Adhere to Cardiac Myocytes via α_4 Integrin, 196
Low-Density Lipoprotein Receptor Knockout Mice Exhibit Exaggerated Microvascular Responses to Inflammatory Stimuli, 274
Inositol phosphate
Left Ventricular Stretch Stimulates Angiotensin II–Mediated Phosphatidylinositol Hydrolysis and Protein Kinase C ϵ Isoform Translocation in Adult Guinea Pig Hearts, 643
α_4 Integrin
Emigrated Rat Neutrophils Adhere to Cardiac Myocytes via α_4 Integrin, 196
Intercellular adhesion molecule-1
Molecular Mechanisms of Anoxia/Reoxygenation-Induced Neutrophil Adherence to Cultured Endothelial Cells, 922
Intima
Vascular Endothelial Growth Factor Increases the Mitogenic Response to Fibroblast Growth Factor-2 in Vascular Smooth Muscle Cells In Vivo via Expression of *fms*-Like Tyrosine Kinase-1, 932
Ion channel
Alterations of Na^+ Currents in Myocytes From Epicardial Border Zone of the Infarcted Heart: A Possible Ionic Mechanism for Reduced Excitability and Postrepolarization Refractoriness, 110
Enhanced Na^+-Ca^{2+} Exchange in the Infarcted Heart: Implications for Excitation-Contraction Coupling, 1083
Ischemia
Contribution of Glycogen and Exogenous Glucose to Glucose Metabolism During Ischemia in the Hypertrophied Rat Heart, 540
Death by Design: Programmed Cell Death in Cardiovascular Biology and Disease, 137
Delayed Enhanced Nitric Oxide–Mediated Coronary Vasodilation Following Brief Ischemia and Prolonged Reperfusion in Conscious Dogs, 53
Mitochondrial Response to Heart Rate Steps in Isolated Rabbit Heart Is Slowed After Myocardial Stunning, 69
Ischemic preconditioning
Ischemic Preconditioning Prevents the Impairment of Hypoxic Coronary Vasodilatation Caused by Ischemia/Reperfusion: Role of Adenosine A_1/A_3 and Bradykinin B_2 Receptor Activation, 415

J

JAK kinase
Leukemia Inhibitory Factor, a Potent Cardiac Hypertrophic Cytokine, Activates the JAK/STAT Pathway in Rat Cardiomyocytes, 656
JAK/STAT pathway
Role of Angiotensin II in Activation of the JAK/STAT Pathway Induced by Acute Pressure Overload in the Rat Heart, 611

K

K^+ channel
Decreased Expression of Kv4.2 and Novel Kv4.3 K^+ Channel Subunit mRNAs in Ventricles of Renovascular Hypertensive Rats, 533
Electrophysiological Characterization of an Alternatively Processed ERG K^+ Channel in Mouse and Human Hearts, 719
Increased Myogenic Tone and Diminished Responsiveness to ATP-Sensitive K^+ Channel Openers in Cerebral Arteries From Diabetic Rats, 996
Ionic Remodeling Underlying Action Potential Changes in a Canine Model of Atrial Fibrillation, 512
Molecular Determinants of Stereoselective Bupivacaine Block of hKv1.5 Channels, 1053
Regional Localization of *ERG*, the Channel Protein Responsible for the Rapid Component of the Delayed Rectifier, K^+ Current in the Ferret Heart, 128
Two Isoforms of the Mouse *Ether-a-go-go*–Related Gene Coassemble to Form Channels With Properties Similar to the Rapidly Activating Component of the Cardiac Delayed Rectifier K^+ Current, 870
Unexpected and Differential Effects of Cl^- Channel Blockers on the Kv4.3 and Kv4.2 K^+ Channels: Implications for the Study of the I_{to2} Current, 711

Kidney
Role of Tissue Renin in the Regulation of Aldosterone Biosynthesis in the Adrenal Cortex of Nephrectomized Rats, 857

Kinase
Angiotensin II Stimulates $p90^{rsk}$ in Vascular Smooth Muscle Cells: A Potential Na^+-H^+ Exchanger Kinase, 268

Kininase II
Potentiation of the Actions of Bradykinin by Angiotensin I–Converting Enzyme Inhibitors: The Role of Expressed Human Bradykinin B_2 Receptors and Angiotensin-Converting Enzyme in CHO Cells, 848

Knockout mice
β-Arrestin1 Knockout Mice Appear Normal but Demonstrate Altered Cardiac Responses to β-Adrenergic Stimulation, 1021

Knockout mouse
Targeted Ablation of the Murine α-Tropomyosin Gene, 1005

L

L-Arginine
Evidence That Late Preconditioning Against Myocardial Stunning in Conscious Rabbits Is Triggered by the Generation of Nitric Oxide, 42
The Protective Effect of Late Preconditioning Against Myocardial Stunning in Conscious Rabbits Is Mediated by Nitric Oxide Synthase: Evidence That Nitric Oxide Acts Both as a Trigger and as a Mediator of the Late Phase of Ischemic Preconditioning, 1094

L-type Ca^{2+} channel
Alternatively Spliced IS6 Segments of the α_{1C} Gene Determine the Tissue-Specific Dihydropyridine Sensitivity of Cardiac and Vascular Smooth Muscle L-Type Ca^{2+} Channels, 526

Late phase of preconditioning
Ischemic Preconditioning Induces Selective Translocation of Protein Kinase C Isoforms ϵ and η in the Heart of Conscious Rabbits Without Subcellular Redistribution of Total Protein Kinase C Activity, 404

LDL metabolism
Comparison of Aorta and Pulmonary Artery: II. LDL Transport and Metabolism Correlate With Susceptibility to Atherosclerosis, 346

LDL permeability
Comparison of Aorta and Pulmonary Artery: II. LDL Transport and Metabolism Correlate With Susceptibility to Atherosclerosis, 346

Left ventricular myocardium
Mechanical Transduction of Nitric Oxide Synthesis in the Beating Heart, 372

Leukemia inhibitory factor
Leukemia Inhibitory Factor, a Potent Cardiac Hypertrophic Cytokine, Activates the JAK/STAT Pathway in Rat Cardiomyocytes, 656

Leukocyte–endothelial cell adhesion
Molecular Mechanisms of Anoxia/Reoxygenation-Induced Neutrophil Adherence to Cultured Endothelial Cells, 922

Leukotriene
Low-Density Lipoprotein Receptor Knockout Mice Exhibit Exaggerated Microvascular Responses to Inflammatory Stimuli, 274

Lipopolysaccharide
Lipopolysaccharide Depresses Cardiac Contractility and β-Adrenergic Contractile Response by Decreasing Myofilament Response to Ca^{2+} in Cardiac Myocytes, 1011

Lipoxygenase
Evidence That Angiotensin II and Lipoxygenase Products Activate c-Jun NH_2-Terminal Kinase, 651

Local anesthetic
Molecular Determinants of Stereoselective Bupivacaine Block of hKv1.5 Channels, 1053

Long-QT syndrome
Electrophysiological Characterization of an Alternatively Processed ERG K^+ Channel in Mouse and Human Hearts, 719
Two Isoforms of the Mouse *Ether-a-go-go*–Related Gene Coassemble to Form Channels With Properties Similar to the Rapidly Activating Component of the Cardiac Delayed Rectifier K^+ Current, 870

Lung
Endothelial Cells of the Human Microvasculature Express Epidermal Fatty Acid–Binding Protein, 297

LY294002
Angiotensin II Activates Phosphatidylinositol 3-Kinase in Vascular Smooth Muscle Cells, 249

Lysophosphatidylcholine
Lysophosphatidylcholine Modulates Cardiac I_{Na} via Multiple Protein Kinase Pathways, 387

M

α_2-Macroglobulin
Transendothelial Neutrophil Migration: Role of Neutrophil-Derived Proteases and Relationship to Transendothelial Protein Movement, 618

Macrophage
Increased Expression of Interleukin-1β and Monocyte Chemotactic and Activating Factor/Monocyte Chemoattractant Protein-1 in the Hypertrophied and Failing Heart With Pressure Overload, 664
Macrophage-Dependent Regulation of Syndecan Gene Expression, 785

Mapping
Attachment of Meandering Reentrant Wave Fronts to Anatomic Obstacles in the Atrium: Role of the Obstacle Size, 753

Matrix metalloproteinase
Regulation of Matrix Metalloproteinase Expression in Human Vascular Smooth Muscle Cells by T Lymphocytes: A Role for CD40 Signaling in Plaque Rupture? 448

Mechanical load
Involvement of Transcriptional and Posttranscriptional Mechanisms in Cardiac Overload–Induced Increase of B-Type Natriuretic Peptide Gene Expression, 694

Mechanical stimulation
Increased Pressure Induces Sustained Protein Kinase C–Independent Herbimycin A–Sensitive Activation of Extracellular Signal–Related Kinase 1/2 in the Rabbit Aorta in Organ Culture, 895

Mechanical stimulus
Mechanical Transduction of Nitric Oxide Synthesis in the Beating Heart, 372

***S*-Methylisothiourea sulfate**
The Protective Effect of Late Preconditioning Against Myocardial Stunning in Conscious Rabbits Is Mediated by Nitric Oxide Synthase: Evidence That Nitric Oxide Acts Both as a

Trigger and as a Mediator of the Late Phase of Ischemic Preconditioning, 1094

MHox
Angiotensin II–Induced Stimulation of Smooth Muscle α-Actin Expression by Serum Response Factor and the Homeodomain Transcription Factor MHox, 600

Mice, estrogen receptor–deficient
Mechanism of Vascular Smooth Muscle Relaxation by Estrogen in Depolarized Rat and Mouse Aorta: Role of Nuclear Estrogen Receptor and Ca^{2+} Uptake, 242

Migration
Effect of Natriuretic Peptide Family on the Oxidized LDL–Induced Migration of Human Coronary Artery Smooth Muscle Cells, 585

Mineralocorticoid
Role of Tissue Renin in the Regulation of Aldosterone Biosynthesis in the Adrenal Cortex of Nephrectomized Rats, 857

Mitochondria
Altered Metabolite Exchange Between Subcellular Compartments in Intact Postischemic Rabbit Hearts, 165
Cardioprotective Effect of Diazoxide and Its Interaction With Mitochondrial ATP-Sensitive K^+ Channels: Possible Mechanism of Cardioprotection, 1072
Mitochondrial Response to Heart Rate Steps in Isolated Rabbit Heart Is Slowed After Myocardial Stunning, 69

Mitogen-activated protein kinase
A Role for Ca^{2+}/Calmodulin-Dependent Protein Kinase II in the Mitogen-Activated Protein Kinase Signaling Cascade of Cultured Rat Aortic Vascular Smooth Muscle Cells, 575
Activation of MAP Kinase In Vivo Follows Balloon Overstretch Injury of Porcine Coronary and Carotid Arteries, 904
Diverse Effects of Heparin on Mitogen-Activated Protein Kinase–Dependent Signal Transduction in Vascular Smooth Muscle Cells, 17

Molecular biology
Interleukin-1β Inhibits Phospholamban Gene Expression in Cultured Cardiomyocytes, 493

Monocyte chemotactic protein-1
Cyclic Strain–Induced Monocyte Chemotactic Protein-1 Gene Expression in Endothelial Cells Involves Reactive Oxygen Species Activation of Activator Protein 1, 1

Mouse
Electrophysiological Characterization of an Alternatively Processed ERG K^+ Channel in Mouse and Human Hearts, 719
Pulmonary Vasoconstriction and Hypertension in Mice With Targeted Disruption of the Endothelial Nitric Oxide Synthase (NOS 3) Gene, 34
Urokinase but Not Tissue Plasminogen Activator Mediates Arterial Neointima Formation in Mice, 829

Myocardial cell
Activated *Rho*A Stimulates c-*fos* Gene Expression in Myocardial Cells, 672

Myocardial hypertrophy
Role of Angiotensin II in Activation of the JAK/STAT Pathway Induced by Acute Pressure Overload in the Rat Heart, 611

Myocardial infarction
Alterations of Na^+ Currents in Myocytes From Epicardial Border Zone of the Infarcted Heart: A Possible Ionic Mechanism for Reduced Excitability and Postrepolarization Refractoriness, 110
Enhanced Na^+-Ca^{2+} Exchange in the Infarcted Heart: Implications for Excitation-Contraction Coupling, 1083

Myocardial ischemia
Cardioprotective Effect of Diazoxide and Its Interaction With Mitochondrial ATP-Sensitive K^+ Channels: Possible Mechanism of Cardioprotection, 1072
Expression, Function, and Regulation of E-Type Prostaglandin Receptors (EP_3) in the Nonischemic and Ischemic Pig Heart, 765
Ischemic Preconditioning Induces Selective Translocation of Protein Kinase C Isoforms ε and η in the Heart of Conscious Rabbits Without Subcellular Redistribution of Total Protein Kinase C Activity, 404

Myocardial ischemia/reperfusion
Evidence That Late Preconditioning Against Myocardial Stunning in Conscious Rabbits Is Triggered by the Generation of Nitric Oxide, 42

Myocardial reperfusion
Ischemic Preconditioning Induces Selective Translocation of Protein Kinase C Isoforms ε and η in the Heart of Conscious Rabbits Without Subcellular Redistribution of Total Protein Kinase C Activity, 404
The Protective Effect of Late Preconditioning Against Myocardial Stunning in Conscious Rabbits Is Mediated by Nitric Oxide Synthase: Evidence That Nitric Oxide Acts Both as a Trigger and as a Mediator of the Late Phase of Ischemic Preconditioning, 1094

Myocyte
Hemodynamic Regulation of Tumor Necrosis Factor-α Gene and Protein Expression in Adult Feline Myocardium, 187
Positive Inotropy Mediated by Diacylglycerol in Rat Ventricular Myocytes, 92

Myofilament
Lipopolysaccharide Depresses Cardiac Contractility and β-Adrenergic Contractile Response by Decreasing Myofilament Response to Ca^{2+} in Cardiac Myocytes, 1011

N

***N*$^{\omega}$-Nitro-L-arginine**
The Protective Effect of Late Preconditioning Against Myocardial Stunning in Conscious Rabbits Is Mediated by Nitric Oxide Synthase: Evidence That Nitric Oxide Acts Both as a Trigger and as a Mediator of the Late Phase of Ischemic Preconditioning, 1094

***N*$^{\omega}$-Nitro-L-arginine methyl ester**
Low-Dose N^{ω}-Nitro-L-Arginine Methyl Ester Treatment Improves Survival Rate and Decreases Myocardial Injury in a Murine Model of Viral Myocarditis Induced by Coxsackievirus B3, 504

***N*^{G}-Nitro-L-arginine methyl ester**
Dual Role for Nitric Oxide in the Regulation of Plasma Volume and Albumin Escape During Endotoxin Shock in Conscious Rats, 840

Na^+-Ca^{2+} exchange
Enhanced Na^+-Ca^{2+} Exchange in the Infarcted Heart: Implications for Excitation-Contraction Coupling, 1083
Low Efficiency of Ca^{2+} Entry Through the Na^+-Ca^{2+} Exchanger as Trigger for Ca^{2+} Release From the Sarcoplasmic Reticulum: A Comparison Between L-Type Ca^{2+} Current and Reverse-Mode Na^+-Ca^{2+} Exchange, 1034

Na^+ channel
Direct Inhibition of Expressed Cardiac L-Type Ca^{2+} Channels by *S*-Nitrosothiol Nitric Oxide Donors, 742

Na^+ current
Alterations of Na^+ Currents in Myocytes From Epicardial Border Zone of the Infarcted Heart: A Possible Ionic Mechanism for Reduced Excitability and Postrepolarization Refractoriness, 110
Modulation of Na^+ Current Inactivation by Stimulation of Protein Kinase C in Cardiac Cells, 380
Tachycardia-Induced Changes in Na^+ Current in a Chronic Dog Model of Atrial Fibrillation, 1045

NADPH oxidase
Pulsatile Stretch Stimulates Superoxide Production and Activates Nuclear Factor-κB in Human Coronary Smooth Muscle, 797

Natriuretic peptide
Effect of Natriuretic Peptide Family on the Oxidized LDL–Induced Migration of Human Coronary Artery Smooth Muscle Cells, 585
Involvement of Transcriptional and Posttranscriptional Mechanisms in Cardiac Overload–Induced Increase of B-Type Natriuretic Peptide Gene Expression, 694

Neointima
Urokinase but Not Tissue Plasminogen Activator Mediates Arterial Neointima Formation in Mice, 829

Neonatal rat
Transcriptional Regulation of Inducible Nitric Oxide Synthase in Cultured Neonatal Rat Cardiac Myocytes, 911
Neutrophil
Emigrated Rat Neutrophils Adhere to Cardiac Myocytes via α_4 Integrin, 196
Exacerbation of Cerebral Injury in Mice That Express the P-Selectin Gene: Identification of P-Selectin Blockade as a New Target for the Treatment of Stroke, 304
Mevalonate-Dependent Inhibition of Transendothelial Migration and Chemotaxis of Human Peripheral Blood Neutrophils by Pravastatin, 963
Newborn
Left Ventricular Norepinephrine and Epinephrine Kinetics at Birth in Lambs, 438
Niflumic acid
Unexpected and Differential Effects of Cl^- Channel Blockers on the Kv4.3 and Kv4.2 K^+ Channels: Implications for the Study of the I_{to2} Current, 711
Nitric oxide
17β-Estradiol Regulation of Human Endothelial Cell Basal Nitric Oxide Release, Independent of Cytosolic Ca^{2+} Mobilization, 885
Delayed Enhanced Nitric Oxide–Mediated Coronary Vasodilation Following Brief Ischemia and Prolonged Reperfusion in Conscious Dogs, 53
Direct Inhibition of Expressed Cardiac L-Type Ca^{2+} Channels by *S*-Nitrosothiol Nitric Oxide Donors, 742
Dual Role for Nitric Oxide in the Regulation of Plasma Volume and Albumin Escape During Endotoxin Shock in Conscious Rats, 840
Increased Myogenic Tone and Diminished Responsiveness to ATP-Sensitive K^+ Channel Openers in Cerebral Arteries From Diabetic Rats, 996
Ischemic Preconditioning Prevents the Impairment of Hypoxic Coronary Vasodilatation Caused by Ischemia/Reperfusion: Role of Adenosine A_1/A_3 and Bradykinin B_2 Receptor Activation, 415
Low-Dose N^{ω}-Nitro-L-Arginine Methyl Ester Treatment Improves Survival Rate and Decreases Myocardial Injury in a Murine Model of Viral Myocarditis Induced by Coxsackievirus B3, 504
Nitric Oxide Can Increase Heart Rate by Stimulating the Hyperpolarization-Activated Inward Current, I_f, 60
Nitric Oxide Inhalation Inhibits Platelet Aggregation and Platelet-Mediated Pulmonary Thrombosis in Rats, 865
Nitric Oxide–Independent Dilation of Conductance Coronary Arteries to Acetylcholine in Conscious Dogs, 977
Pulmonary Vasoconstriction and Hypertension in Mice With Targeted Disruption of the Endothelial Nitric Oxide Synthase (NOS 3) Gene, 34
Nitric oxide synthase
17β-Estradiol Regulation of Human Endothelial Cell Basal Nitric Oxide Release, Independent of Cytosolic Ca^{2+} Mobilization, 885
Estrogen Upregulates Endothelial Nitric Oxide Synthase Gene Expression in Fetal Pulmonary Artery Endothelium, 355
Evidence That Late Preconditioning Against Myocardial Stunning in Conscious Rabbits Is Triggered by the Generation of Nitric Oxide, 42
Lipopolysaccharide Depresses Cardiac Contractility and β-Adrenergic Contractile Response by Decreasing Myofilament Response to Ca^{2+} in Cardiac Myocytes, 1011
Nitrogen radicals
Evidence That Late Preconditioning Against Myocardial Stunning in Conscious Rabbits Is Triggered by the Generation of Nitric Oxide, 42
Nitrovasodilator
Nitric Oxide Can Increase Heart Rate by Stimulating the Hyperpolarization-Activated Inward Current, I_f, 60
Norepinephrine
Left Ventricular Norepinephrine and Epinephrine Kinetics at Birth in Lambs, 438
Norepinephrine exocytosis
Bradykinin B_2-Receptor Activation Augments Norepinephrine Exocytosis From Cardiac Sympathetic Nerve Endings: Mediation by Autocrine/Paracrine Mechanisms, 774
Nuclear factor
Transcriptional Regulation of Inducible Nitric Oxide Synthase in Cultured Neonatal Rat Cardiac Myocytes, 911
Nuclear factor-κB
Pulsatile Stretch Stimulates Superoxide Production and Activates Nuclear Factor-κB in Human Coronary Smooth Muscle, 797
Nuclear magnetic resonance spectroscopy
Altered Metabolite Exchange Between Subcellular Compartments in Intact Postischemic Rabbit Hearts, 165
Nuclear transcription factor
Molecular Mechanisms of Anoxia/Reoxygenation-Induced Neutrophil Adherence to Cultured Endothelial Cells, 922

O

Outer diameter ratio
Flow-Induced Vascular Remodeling in the Rat Carotid Artery Diminishes With Age, 311
Oxidation
Direct Inhibition of Expressed Cardiac L-Type Ca^{2+} Channels by *S*-Nitrosothiol Nitric Oxide Donors, 742
Oxidative stress
Induction of Vascular Endothelial Growth Factor in Balloon-Injured Baboon Arteries: A Novel Role for Reactive Oxygen Species in Atherosclerosis, 24
Oxidized low-density lipoprotein
Effect of Natriuretic Peptide Family on the Oxidized LDL–Induced Migration of Human Coronary Artery Smooth Muscle Cells, 585
Oxygen radicals
Evidence That Late Preconditioning Against Myocardial Stunning in Conscious Rabbits Is Triggered by the Generation of Nitric Oxide, 42

P

P-Selectin
Exacerbation of Cerebral Injury in Mice That Express the P-Selectin Gene: Identification of P-Selectin Blockade as a New Target for the Treatment of Stroke, 304
P53
Increased Sensitivity of Human Vascular Smooth Muscle Cells From Atherosclerotic Plaques to p53-Mediated Apoptosis, 591
PD123177
Angiotensin II Induces Apoptosis of Human Endothelial Cells: Protective Effect of Nitric Oxide, 970
Peptidase
Potentiation of the Actions of Bradykinin by Angiotensin I–Converting Enzyme Inhibitors: The Role of Expressed Human Bradykinin B_2 Receptors and Angiotensin-Converting Enzyme in CHO Cells, 848
Permeability
High Glucose Concentrations Increase Endothelial Cell Permeability via Activation of Protein Kinase Cα, 363
Vascular Endothelial Growth Factor Increases the Mitogenic Response to Fibroblast Growth Factor-2 in Vascular Smooth Muscle Cells In Vivo via Expression of *fms*-Like Tyrosine Kinase-1, 932
Phosphatidylinositol 3-kinase
Angiotensin II Activates Phosphatidylinositol 3-Kinase in Vascular Smooth Muscle Cells, 249
Rapamycin Inhibits α_1-Adrenergic Receptor–Stimulated Cardiac Myocyte Hypertrophy but Not Activation of Hypertrophy-Associated Genes: Evidence for Involvement of p70 S6 Kinase, 176

Phospholamban
Adenoviral Gene Transfer of Phospholamban in Isolated Rat Cardiomyocytes: Rescue Effects by Concomitant Gene Transfer of Sarcoplasmic Reticulum Ca^{2+}-ATPase, 145
Interleukin-1β Inhibits Phospholamban Gene Expression in Cultured Cardiomyocytes, 493
Monomeric Phospholamban Overexpression in Transgenic Mouse Hearts, 485
Phospholipase A_2
Nitric Oxide–Independent Dilation of Conductance Coronary Arteries to Acetylcholine in Conscious Dogs, 977
Phospholipase C
Angiotensin II Stimulates Tyrosine Phosphorylation of Phospholipase C-γ–Associated Proteins: Characterization of a c-Src–Dependent 97-kD Protein in Vascular Smooth Muscle Cells, 550
Phenylephrine-Induced Ca^{2+} Oscillations in Canine Pulmonary Artery Smooth Muscle Cells, 812
Phospholipase D
Mechanisms of Action of Troglitazone in the Prevention of High Glucose–Induced Migration and Proliferation of Cultured Coronary Smooth Muscle Cells, 953
Placenta
Endothelial Cells of the Human Microvasculature Express Epidermal Fatty Acid–Binding Protein, 297
Plasminogen activator
Urokinase but Not Tissue Plasminogen Activator Mediates Arterial Neointima Formation in Mice, 829
Platelet-activating factor
Low-Density Lipoprotein Receptor Knockout Mice Exhibit Exaggerated Microvascular Responses to Inflammatory Stimuli, 274
Platelet aggregation
Nitric Oxide Inhalation Inhibits Platelet Aggregation and Platelet-Mediated Pulmonary Thrombosis in Rats, 865
Platelet-derived growth factor
FGF-1–Induced Platelet-Derived Growth Factor-A Chain Gene Expression in Endothelial Cells Involves Transcriptional Activation by Early Growth Response Factor-1, 282
Inducible Expression of Egr-1–Dependent Genes: A Paradigm of Transcriptional Activation in Vascular Endothelium, 457
Platelet-Derived Growth Factor Ligand and Receptor Expression in Response to Altered Blood Flow In Vivo, 320
Polarization
Interaction of the Heavy and Light Chains of Cardiac Myosin Subfragment-1 With F-Actin, 688
Porcine coronary artery
Potentiation of Endothelium-Dependent Relaxation by Epoxyeicosatrienoic Acids, 258
Porphyrinic sensor
Mechanical Transduction of Nitric Oxide Synthesis in the Beating Heart, 372
Positive inotropy
Positive Inotropy Mediated by Diacylglycerol in Rat Ventricular Myocytes, 92
Postnatal development
Developmental Changes in Transient Outward Current in Mouse Ventricle, 120
Pressure overload
Hemodynamic Regulation of Tumor Necrosis Factor-α Gene and Protein Expression in Adult Feline Myocardium, 187
Is There Major Involvement of the Renin-Angiotensin System in Cardiac Hypertrophy? 639
Role of Angiotensin II in Activation of the JAK/STAT Pathway Induced by Acute Pressure Overload in the Rat Heart, 611
Proinflammatory cytokine
Interleukin-1β Inhibits Phospholamban Gene Expression in Cultured Cardiomyocytes, 493
Proliferation
Diverse Effects of Heparin on Mitogen-Activated Protein Kinase–Dependent Signal Transduction in Vascular Smooth Muscle Cells, 17
Induction of Vascular Endothelial Growth Factor in Balloon-Injured Baboon Arteries: A Novel Role for Reactive Oxygen Species in Atherosclerosis, 24
Platelet-Derived Growth Factor Ligand and Receptor Expression in Response to Altered Blood Flow In Vivo, 320
Prostaglandin
Low-Dose N^{ω}-Nitro-L-Arginine Methyl Ester Treatment Improves Survival Rate and Decreases Myocardial Injury in a Murine Model of Viral Myocarditis Induced by Coxsackievirus B3, 504
Prostaglandin E_1
Expression, Function, and Regulation of E-Type Prostaglandin Receptors (EP_3) in the Nonischemic and Ischemic Pig Heart, 765
Protease
Angiotensin II Induces Apoptosis of Human Endothelial Cells: Protective Effect of Nitric Oxide, 970
Protein kinase A
Endothelin-1 Inhibits the Slow Component of Cardiac Delayed Rectifier K^+ Currents via a Pertussis Toxin–Sensitive Mechanism, 211
Protein kinase C
Experimental Diabetes Is Associated With Functional Activation of Protein Kinase Cε and Phosphorylation of Troponin I in the Heart, Which Are Prevented by Angiotensin II Receptor Blockade, 1027
High Glucose Concentrations Increase Endothelial Cell Permeability via Activation of Protein Kinase Cα, 363
Increased Pressure Induces Sustained Protein Kinase C–Independent Herbimycin A–Sensitive Activation of Extracellular Signal–Related Kinase 1/2 in the Rabbit Aorta in Organ Culture, 895
Ischemic Preconditioning Induces Selective Translocation of Protein Kinase C Isoforms ϵ and η in the Heart of Conscious Rabbits Without Subcellular Redistribution of Total Protein Kinase C Activity, 404
Left Ventricular Stretch Stimulates Angiotensin II–Mediated Phosphatidylinositol Hydrolysis and Protein Kinase C ϵ Isoform Translocation in Adult Guinea Pig Hearts, 643
Lysophosphatidylcholine Modulates Cardiac I_{Na} via Multiple Protein Kinase Pathways, 387
Mechanisms of Action of Troglitazone in the Prevention of High Glucose–Induced Migration and Proliferation of Cultured Coronary Smooth Muscle Cells, 953
Modulation of Na^+ Current Inactivation by Stimulation of Protein Kinase C in Cardiac Cells, 380
Positive Inotropy Mediated by Diacylglycerol in Rat Ventricular Myocytes, 92
Protein synthesis
Trophic Effect of Human Pericardial Fluid on Adult Cardiac Myocytes: Differential Role of Fibroblast Growth Factor-2 and Factors Related to Ventricular Hypertrophy, 679
Protein tyrosine kinase
Lysophosphatidylcholine Modulates Cardiac I_{Na} via Multiple Protein Kinase Pathways, 387
Pulmonary artery
Comparison of Aorta and Pulmonary Artery: I. Early Cholesterol Accumulation and Relative Susceptibility to Atheromatous Lesions, 338
Comparison of Aorta and Pulmonary Artery: II. LDL Transport and Metabolism Correlate With Susceptibility to Atherosclerosis, 346
Phenylephrine-Induced Ca^{2+} Oscillations in Canine Pulmonary Artery Smooth Muscle Cells, 812
Pulmonary circulation
Estrogen Upregulates Endothelial Nitric Oxide Synthase Gene Expression in Fetal Pulmonary Artery Endothelium, 355
Pulmonary hypertension
Smooth Muscle Cells Isolated From Discrete Compartments of the Mature Vascular Media Exhibit Unique Phenotypes and Distinct Growth Capabilities, 940
Pulmonary thromboembolism
Nitric Oxide Inhalation Inhibits Platelet Aggregation and Platelet-Mediated Pulmonary Thrombosis in Rats, 865

Pulmonary vascular resistance
Pulmonary Vasoconstriction and Hypertension in Mice With Targeted Disruption of the Endothelial Nitric Oxide Synthase (NOS 3) Gene, 34

R

Rabbit
Mechanical Transduction of Nitric Oxide Synthesis in the Beating Heart, 372
Radioactive microsphere
Left Ventricular Norepinephrine and Epinephrine Kinetics at Birth in Lambs, 438
Rapamycin
Rapamycin Inhibits α_1-Adrenergic Receptor–Stimulated Cardiac Myocyte Hypertrophy but Not Activation of Hypertrophy-Associated Genes: Evidence for Involvement of p70 S6 Kinase, 176
Rapid atrial pacing
Tachycardia-Induced Changes in Na^+ Current in a Chronic Dog Model of Atrial Fibrillation, 1045
Rapidly activating component of delayed rectifier K^+ current
Two Isoforms of the Mouse *Ether-a-go-go*–Related Gene Coassemble to Form Channels With Properties Similar to the Rapidly Activating Component of the Cardiac Delayed Rectifier K^+ Current, 870
Rat
Inhibition of L-Type Ca^{2+} Channel Current in Rat Ventricular Myocytes by Terfenadine, 202
Mechanical Transduction of Nitric Oxide Synthesis in the Beating Heart, 372
Rat aorta
Coagulation Factor Xa Induces Endothelium-Dependent Relaxations in Rat Aorta, 824
Reactive oxygen species
Cyclic Strain–Induced Monocyte Chemotactic Protein-1 Gene Expression in Endothelial Cells Involves Reactive Oxygen Species Activation of Activator Protein 1, 1
Receptor desensitization
Potentiation of the Actions of Bradykinin by Angiotensin I–Converting Enzyme Inhibitors: The Role of Expressed Human Bradykinin B_2 Receptors and Angiotensin-Converting Enzyme in CHO Cells, 848
Receptor internalization
Potentiation of the Actions of Bradykinin by Angiotensin I–Converting Enzyme Inhibitors: The Role of Expressed Human Bradykinin B_2 Receptors and Angiotensin-Converting Enzyme in CHO Cells, 848
Receptor tyrosine kinase
Tie2 Expression and Phosphorylation in Angiogenic and Quiescent Adult Tissues, 567
Reentry
Attachment of Meandering Reentrant Wave Fronts to Anatomic Obstacles in the Atrium: Role of the Obstacle Size, 753
Renin gene expression
Conserved Enhancer Elements in Human and Mouse Renin Genes Have Different Transcriptional Effects in As4.1 Cells, 558
Renovascular hypertension
Decreased Expression of Kv4.2 and Novel Kv4.3 K^+ Channel Subunit mRNAs in Ventricles of Renovascular Hypertensive Rats, 533
Reperfusion
Altered Metabolite Exchange Between Subcellular Compartments in Intact Postischemic Rabbit Hearts, 165
Restenosis
Activation of MAP Kinase In Vivo Follows Balloon Overstretch Injury of Porcine Coronary and Carotid Arteries, 904
Diverse Effects of Heparin on Mitogen-Activated Protein Kinase–Dependent Signal Transduction in Vascular Smooth Muscle Cells, 17
Growth Factor and Cytokine-Regulated Hyaluronan-Binding Protein TSG-6 Is Localized to the Injury-Induced Rat Neointima and Confers Enhanced Growth in Vascular Smooth Muscle Cells, 289
Increased Sensitivity of Human Vascular Smooth Muscle Cells From Atherosclerotic Plaques to p53-Mediated Apoptosis, 591
Urokinase but Not Tissue Plasminogen Activator Mediates Arterial Neointima Formation in Mice, 829
***Rho*A**
Activated *Rho*A Stimulates c-*fos* Gene Expression in Myocardial Cells, 672
Ribosomal S6-kinase
Rapamycin Inhibits α_1-Adrenergic Receptor–Stimulated Cardiac Myocyte Hypertrophy but Not Activation of Hypertrophy-Associated Genes: Evidence for Involvement of p70 S6 Kinase, 176
RNA
Interleukin-1β Inhibits Phospholamban Gene Expression in Cultured Cardiomyocytes, 493
Ryanodine receptor
Actions of cADP-Ribose and Its Antagonists on Contraction in Guinea Pig Isolated Ventricular Myocytes: Influence of Temperature, 879

S

Saphenous vein
Venous Myogenic Tone and Its Regulation Through K^+ Channels Depends on Chronic Intravascular Pressure, 988
Sarcolemma
Expression, Function, and Regulation of E-Type Prostaglandin Receptors (EP_3) in the Nonischemic and Ischemic Pig Heart, 765
Sarcomere
Expression of a Mutant ($Arg^{92}Gln$) Human Cardiac Troponin T, Known to Cause Hypertrophic Cardiomyopathy, Impairs Adult Cardiac Myocyte Contractility, 76
Sarcoplasmic reticulum
Actions of cADP-Ribose and Its Antagonists on Contraction in Guinea Pig Isolated Ventricular Myocytes: Influence of Temperature, 879
Adenoviral Gene Transfer of Phospholamban in Isolated Rat Cardiomyocytes: Rescue Effects by Concomitant Gene Transfer of Sarcoplasmic Reticulum Ca^{2+}-ATPase, 145
Ca^{2+} Sparks: Jumping the Gap From the Cell to Cardiac Muscle, 636
Enhanced Ca^{2+} Current and Decreased Ca^{2+} Efflux Restore Sarcoplasmic Reticulum Ca^{2+} Content After Depletion, 477
Low Efficiency of Ca^{2+} Entry Through the Na^+-Ca^{2+} Exchanger as Trigger for Ca^{2+} Release From the Sarcoplasmic Reticulum: A Comparison Between L-Type Ca^{2+} Current and Reverse-Mode Na^+-Ca^{2+} Exchange, 1034
Skeletal Muscle Sarcoplasmic Reticulum Ca^{2+}-ATPase Gene Expression in Congestive Heart Failure, 703
Selectin
Molecular Mechanisms of Anoxia/Reoxygenation-Induced Neutrophil Adherence to Cultured Endothelial Cells, 922
Septic shock
Dual Role for Nitric Oxide in the Regulation of Plasma Volume and Albumin Escape During Endotoxin Shock in Conscious Rats, 840
Serum
Trophic Effect of Human Pericardial Fluid on Adult Cardiac Myocytes: Differential Role of Fibroblast Growth Factor-2 and Factors Related to Ventricular Hypertrophy, 679
Shear stress
Flow-Induced Vascular Remodeling in the Rat Carotid Artery Diminishes With Age, 311
Platelet-Derived Growth Factor Ligand and Receptor Expression in Response to Altered Blood Flow In Vivo, 320
Signal transducer(s) and activator(s) of transcription
Leukemia Inhibitory Factor, a Potent Cardiac Hypertrophic Cytokine, Activates the JAK/STAT Pathway in Rat Cardiomyocytes, 656

Signal transduction
Angiotensin II Stimulates $p90^{rsk}$ in Vascular Smooth Muscle Cells: A Potential Na^+-H^+ Exchanger Kinase, 268
Increased Pressure Induces Sustained Protein Kinase C–Independent Herbimycin A–Sensitive Activation of Extracellular Signal–Related Kinase 1/2 in the Rabbit Aorta in Organ Culture, 895
Is There Major Involvement of the Renin-Angiotensin System in Cardiac Hypertrophy? 639
Left Ventricular Stretch Stimulates Angiotensin II–Mediated Phosphatidylinositol Hydrolysis and Protein Kinase C ϵ Isoform Translocation in Adult Guinea Pig Hearts, 643
Leukemia Inhibitory Factor, a Potent Cardiac Hypertrophic Cytokine, Activates the JAK/STAT Pathway in Rat Cardiomyocytes, 656
Role of Angiotensin II in Activation of the JAK/STAT Pathway Induced by Acute Pressure Overload in the Rat Heart, 611
Sinoatrial node
Nitric Oxide Can Increase Heart Rate by Stimulating the Hyperpolarization-Activated Inward Current, I_f, 60
SITS
Unexpected and Differential Effects of Cl^- Channel Blockers on the Kv4.3 and Kv4.2 K^+ Channels: Implications for the Study of the I_{to2} Current, 711
Skeletal muscle
Skeletal Muscle Sarcoplasmic Reticulum Ca^{2+}-ATPase Gene Expression in Congestive Heart Failure, 703
Smooth muscle
Activation of MAP Kinase In Vivo Follows Balloon Overstretch Injury of Porcine Coronary and Carotid Arteries, 904
Angiotensin II Stimulates Tyrosine Phosphorylation of Phospholipase C-γ–Associated Proteins: Characterization of a c-Src–Dependent 97-kD Protein in Vascular Smooth Muscle Cells, 550
Smooth muscle α-actin promoter
Angiotensin II–Induced Stimulation of Smooth Muscle α-Actin Expression by Serum Response Factor and the Homeodomain Transcription Factor MHox, 600
Smooth muscle cell
Angiotensin II Activates Phosphatidylinositol 3-Kinase in Vascular Smooth Muscle Cells, 249
Effect of Natriuretic Peptide Family on the Oxidized LDL–Induced Migration of Human Coronary Artery Smooth Muscle Cells, 585
Growth Factor and Cytokine-Regulated Hyaluronan-Binding Protein TSG-6 Is Localized to the Injury-Induced Rat Neointima and Confers Enhanced Growth in Vascular Smooth Muscle Cells, 289
Regulation of Matrix Metalloproteinase Expression in Human Vascular Smooth Muscle Cells by T Lymphocytes: A Role for CD40 Signaling in Plaque Rupture? 448
Smooth muscle cell heterogeneity
Smooth Muscle Cells Isolated From Discrete Compartments of the Mature Vascular Media Exhibit Unique Phenotypes and Distinct Growth Capabilities, 940
Smooth muscle cell proliferation
Smooth Muscle Cells Isolated From Discrete Compartments of the Mature Vascular Media Exhibit Unique Phenotypes and Distinct Growth Capabilities, 940
Source-sink relationship
Attachment of Meandering Reentrant Wave Fronts to Anatomic Obstacles in the Atrium: Role of the Obstacle Size, 753
Spillover
Left Ventricular Norepinephrine and Epinephrine Kinetics at Birth in Lambs, 438
Stretch
Activation of MAP Kinase In Vivo Follows Balloon Overstretch Injury of Porcine Coronary and Carotid Arteries, 904
Left Ventricular Stretch Stimulates Angiotensin II–Mediated Phosphatidylinositol Hydrolysis and Protein Kinase C ϵ Isoform Translocation in Adult Guinea Pig Hearts, 643
Pulsatile Stretch Stimulates Superoxide Production and Activates Nuclear Factor-κB in Human Coronary Smooth Muscle, 797
Stroke
Exacerbation of Cerebral Injury in Mice That Express the P-Selectin Gene: Identification of P-Selectin Blockade as a New Target for the Treatment of Stroke, 304
Stunned myocardium
Altered Metabolite Exchange Between Subcellular Compartments in Intact Postischemic Rabbit Hearts, 165
Stunning
Delayed Enhanced Nitric Oxide–Mediated Coronary Vasodilation Following Brief Ischemia and Prolonged Reperfusion in Conscious Dogs, 53
Mitochondrial Response to Heart Rate Steps in Isolated Rabbit Heart Is Slowed After Myocardial Stunning, 69
Superoxide
Pulsatile Stretch Stimulates Superoxide Production and Activates Nuclear Factor-κB in Human Coronary Smooth Muscle, 797
Swelling
Inhibitory Effects of Glibenclamide on Cystic Fibrosis Transmembrane Regulator, Swelling-Activated, and Ca^{2+}-Activated Cl^- Channels in Mammalian Cardiac Myocytes, 101
Syndecan
Macrophage-Dependent Regulation of Syndecan Gene Expression, 785

T

Tachyphylaxis
Potentiation of the Actions of Bradykinin by Angiotensin I–Converting Enzyme Inhibitors: The Role of Expressed Human Bradykinin B_2 Receptors and Angiotensin-Converting Enzyme in CHO Cells, 848
Targeted nitric oxide synthase 3 gene disruption
Pulmonary Vasoconstriction and Hypertension in Mice With Targeted Disruption of the Endothelial Nitric Oxide Synthase (NOS 3) Gene, 34
Terfenadine
Inhibition of L-Type Ca^{2+} Channel Current in Rat Ventricular Myocytes by Terfenadine, 202
Thrombin
Coagulation Factor Xa Induces Endothelium-Dependent Relaxations in Rat Aorta, 824
Tie2
Tie2 Expression and Phosphorylation in Angiogenic and Quiescent Adult Tissues, 567
Trabeculae
Ca^{2+} 'Sparks' and Waves in Intact Ventricular Muscle Resolved by Confocal Imaging, 462
Transcription
FGF-1–Induced Platelet-Derived Growth Factor-A Chain Gene Expression in Endothelial Cells Involves Transcriptional Activation by Early Growth Response Factor-1, 282
Inducible Expression of Egr-1–Dependent Genes: A Paradigm of Transcriptional Activation in Vascular Endothelium, 457
Involvement of Transcriptional and Posttranscriptional Mechanisms in Cardiac Overload–Induced Increase of B-Type Natriuretic Peptide Gene Expression, 694
Transcriptional regulation
Transcriptional Regulation of Inducible Nitric Oxide Synthase in Cultured Neonatal Rat Cardiac Myocytes, 911
Transfection
Monocytes Harboring Cytomegalovirus: Interactions With Endothelial Cells, Smooth Muscle Cells, and Oxidized Low-Density Lipoprotein: Possible Mechanisms for Activating Virus Delivered by Monocytes to Sites of Vascular Injury, 8
Transgenic mouse
Dilated Cardiomyopathy in Transgenic Mice With Cardiac-Specific Overexpression of Tumor Necrosis Factor-α, 627
Exacerbation of Cerebral Injury in Mice That Express the P-Selectin Gene: Identification of P-Selectin Blockade as a New Target for the Treatment of Stroke, 304
Monomeric Phospholamban Overexpression in Transgenic Mouse Hearts, 485

Transient outward current
Decreased Expression of Kv4.2 and Novel Kv4.3 K^+ Channel Subunit mRNAs in Ventricles of Renovascular Hypertensive Rats, 533
Unexpected and Differential Effects of Cl^- Channel Blockers on the Kv4.3 and Kv4.2 K^+ Channels: Implications for the Study of the I_{to2} Current, 711
Transient outward K^+ current
Developmental Changes in Transient Outward Current in Mouse Ventricle, 120
Transmembrane potential
Line Stimulation Parallel to Myofibers Enhances Regional Uniformity of Transmembrane Voltage Changes in Rabbit Hearts, 229
Tricarboxylic acid cycle
Altered Metabolite Exchange Between Subcellular Compartments in Intact Postischemic Rabbit Hearts, 165
α-Tropomyosin
Targeted Ablation of the Murine α-Tropomyosin Gene, 1005
Troponin T
Expression of a Mutant ($Arg^{92}Gln$) Human Cardiac Troponin T, Known to Cause Hypertrophic Cardiomyopathy, Impairs Adult Cardiac Myocyte Contractility, 76
Trypsin
Coagulation Factor Xa Induces Endothelium-Dependent Relaxations in Rat Aorta, 824
Tumor necrosis factor-α
Dilated Cardiomyopathy in Transgenic Mice With Cardiac-Specific Overexpression of Tumor Necrosis Factor-α, 627
Hemodynamic Regulation of Tumor Necrosis Factor-α Gene and Protein Expression in Adult Feline Myocardium, 187
Low-Density Lipoprotein Receptor Knockout Mice Exhibit Exaggerated Microvascular Responses to Inflammatory Stimuli, 274
Tyrosine kinase
Angiotensin II Stimulates Tyrosine Phosphorylation of Phospholipase C-γ–Associated Proteins: Characterization of a c-Src–Dependent 97-kD Protein in Vascular Smooth Muscle Cells, 550
Increased Pressure Induces Sustained Protein Kinase C–Independent Herbimycin A–Sensitive Activation of Extracellular Signal–Related Kinase 1/2 in the Rabbit Aorta in Organ Culture, 895

U

Use-dependent block
Inhibition of L-Type Ca^{2+} Channel Current in Rat Ventricular Myocytes by Terfenadine, 202

V

Vascular endothelial growth factor
Vascular Endothelial Growth Factor Increases the Mitogenic Response to Fibroblast Growth Factor-2 in Vascular Smooth Muscle Cells In Vivo via Expression of *fms*-Like Tyrosine Kinase-1, 932
Vascular endothelium
17β-Estradiol Regulation of Human Endothelial Cell Basal Nitric Oxide Release, Independent of Cytosolic Ca^{2+} Mobilization, 885
Vascular permeability
Dual Role for Nitric Oxide in the Regulation of Plasma Volume and Albumin Escape During Endotoxin Shock in Conscious Rats, 840
Vascular smooth muscle
A Role for Ca^{2+}/Calmodulin-Dependent Protein Kinase II in the Mitogen-Activated Protein Kinase Signaling Cascade of Cultured Rat Aortic Vascular Smooth Muscle Cells, 575
Alternatively Spliced IS6 Segments of the α_{1C} Gene Determine the Tissue-Specific Dihydropyridine Sensitivity of Cardiac and Vascular Smooth Muscle L-Type Ca^{2+} Channels, 526
Increased Myogenic Tone and Diminished Responsiveness to ATP-Sensitive K^+ Channel Openers in Cerebral Arteries From Diabetic Rats, 996
Mechanisms of Action of Troglitazone in the Prevention of High Glucose–Induced Migration and Proliferation of Cultured Coronary Smooth Muscle Cells, 953
Vascular smooth muscle cell
Angiotensin II–Induced Stimulation of Smooth Muscle α-Actin Expression by Serum Response Factor and the Homeodomain Transcription Factor MHox, 600
Ventricle
Regional Localization of *ERG*, the Channel Protein Responsible for the Rapid Component of the Delayed Rectifier, K^+ Current in the Ferret Heart, 128
Ventricular hypertrophy
Decreased Expression of Kv4.2 and Novel Kv4.3 K^+ Channel Subunit mRNAs in Ventricles of Renovascular Hypertensive Rats, 533
Ventricular myocardium
Reduced Adenosine A_1 Receptor and G_α Protein Coupling in Rat Ventricular Myocardium During Aging, 1065
Ventricular myocyte
Alterations of Na^+ Currents in Myocytes From Epicardial Border Zone of the Infarcted Heart: A Possible Ionic Mechanism for Reduced Excitability and Postrepolarization Refractoriness, 110
Ventricular myocytes, mouse
Developmental Changes in Transient Outward Current in Mouse Ventricle, 120
Viral gene expression regulation
Monocytes Harboring Cytomegalovirus: Interactions With Endothelial Cells, Smooth Muscle Cells, and Oxidized Low-Density Lipoprotein: Possible Mechanisms for Activating Virus Delivered by Monocytes to Sites of Vascular Injury, 8
Viral myocarditis
Low-Dose N^{ω}-Nitro-L-Arginine Methyl Ester Treatment Improves Survival Rate and Decreases Myocardial Injury in a Murine Model of Viral Myocarditis Induced by Coxsackievirus B3, 504
Voltage-dependent K^+ channel
Venous Myogenic Tone and Its Regulation Through K^+ Channels Depends on Chronic Intravascular Pressure, 988

W

Wound healing
Tie2 Expression and Phosphorylation in Angiogenic and Quiescent Adult Tissues, 567